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=> d his

     (FILE 'HOME' ENTERED AT 13:59:35 ON 12 MAR 2002)

     FILE 'REGISTRY' ENTERED AT 13:59:40 ON 12 MAR 2002
L1              STRUCTURE UPLOADED
L2            2 S L1

     FILE 'REGISTRY' ENTERED AT 14:57:39 ON 12 MAR 2002
L3           99 S L1 FULL
L4              STRUCTURE UPLOADED
L5           35 S L4 FULL SUB=L3

     FILE 'USPATFULL' ENTERED AT 15:01:26 ON 12 MAR 2002
L6            1 S L5

     FILE 'CAPLUS' ENTERED AT 15:02:44 ON 12 MAR 2002
L7           25 S L5

     FILE 'BEILSTEIN' ENTERED AT 15:05:46 ON 12 MAR 2002
L8          121 S L4 FULL

     FILE 'MARPAT' ENTERED AT 15:07:03 ON 12 MAR 2002
L9            3 S L5
L10          39 S L5 FULL
L11          38 S L10/COM

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                                                   ENTRY    SESSION
FULL ESTIMATED COST                               207.39     503.33

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                                                   ENTRY    SESSION
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STRUCTURE FILE UPDATES:   10 MAR 2002  HIGHEST RN 400003-05-6
DICTIONARY FILE UPDATES:  10 MAR 2002  HIGHEST RN 400003-05-6

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Calculated physical property data is now available.  See HELP PROPERTIES
for more information.  See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

The P indicator for Preparations was not generated for all of the
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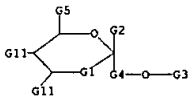
L8 ANSWER 15 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 130:38635 MARPAT
TITLE: Preparation and analgesic properties of glycoconjugates of opiated substances
INVENTOR(S): Valencia, Gregorio; Rodriguez, Raquel Emilia
PATENT ASSIGNEE(S): Rolabo Sl, Spain; Cockbain Julian
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9854196	A1	19981203	WO 1998-GB1578	19980529
W: CA, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 984974	A1	20000315	EP 1998-924479	19980529
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				

PRIORITY APPLN. INFO.: GB 1997-11118 19970529
WO 1998-GB1578 19980529

AB Title compds., being a sugar deriv. of a biol. active opiate comprising at least one sugar residue coupled with at least one opiate residue through an .alpha.-glycosidic bond, [I; R = CH3, cyclopropylmethyl, cyclobutylmethyl, allyl; R1 = H, OH, OAc, OMe, CH2; R2 = H, OH; X = glycosidic bond, linker group; Y = mono, di, or trisaccharide sugar; variable bond is either single or double], salts, analogs, and complexes thereof are prepd. as analgesics.

MSTR 1



G1 = (0-1) 18

G2 = 20

G7 = alkyl<(1-18)>
G9 = OH

L8 ANSWER 15 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)
G10 = 48

G11 = OH
DER: and salts, analogues, and complexes
MPL: claim 3

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 16 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 129:343328 MARPAT
TITLE: Preparation of new benzyl- and (phenylethyl)amine derivatives as medicaments
INVENTOR(S): Anderskewitz, Ralf; Schromm, Kurt; Renth, Ernst-Otto; Birke, Franz; Jennewein, Hans Michael; Meade, Christopher John Montague
PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9849131	A1	19981105	WO 1998-EP2530	19980429
W: AU, BG, BR, BY, CA, CN, CZ, EE, HU, ID, IL, JP, KR, KZ, LT, LV, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, UZ, VN, YU				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CN 1204315	A	19990106	CN 1996-198959	19961211
DE 19718334	A1	19981105	DE 1997-19718334	19970430
ZA 9803523	A	19981030	ZA 1998-3523	19980428
AU 9877600	A1	19981124	AU 1998-77600	19980429
EP 980351	A1	20000223	EP 1998-925500	19980429
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001524966	T2	20011204	JP 1998-546609	19980429
MX 9909960	A	20000630	MX 1999-9960	19991028
US 6288277	B1	20010911	US 2000-423160	20000403

PRIORITY APPLN. INFO.: DE 1997-19718334 19970430
WO 1998-EP2530 19980429

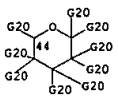
AB The title compds. [I; X, Y = O, NH, NMe2, CH2; R1, R2 = H, OH, F, Cl, Br, iodo, C1-6 alkyl, O(C1-6 alkyl), CF3; R3 = H, NH2, NHCOR5; R4 = H, CH2NH2, CH2NHCOR5; R5 = H, C1-6 alkyl, (un)substituted Ph, O(C1-6 alkyl)]; A = CR6R7, CO, SOx, O; R6 = H, C1-4 alkyl, CF3, etc.; R7 = H, C1-4 alkyl, etc.; B = C1-6 alkyl, Ph, naphthyl, thienyl, pyridyl, etc.; x = 0-2; with provisos] and their optical isomers, mixts. of enantiomers, racemates and salts with pharmaceutically acceptable acids, LTB4 antagonists useful for the therapy of arthritis, asthma, chronical lung diseases, , psoriasis, cystic fibrosis, Alzheimer's disease, etc., were prepd. For example, dissolving 1.15 g 4-(H2NCH2CH2)C6H4OH in 15 mL MeOH, adding 1.5 g NaOMe (30% soln. in MeOH), evapg. the mixt., adding the residue to a soln. of 2.93 g 3-[4-(2-phenylpropyl)phenoxymethyl]benzyl chloride in 25 mL MeCN, stirring the whole for 3 h at 60-70.degree., evapg. the solvents and treating the residue with alc. HCl gave 1 g II-HCl (m. 145.degree.). Approx. 34 I were prepd. and Ki values for approx. 32 I varying between 0.5 and 263 nM were given.

MSTR 1

G11 = alkylene<(1-)> (SO (1-) G24)
G13 = 37

L8 ANSWER 16 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

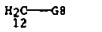
G17 = 44



G20 = OH / CH2OH
G24 = CO2H
DER: and acid addition salts
MPL: claim 1
NTE: substitution is restricted
NTE: also incorporates claim 4, sturcture IV
STE: and optical isomers, enantiomeric mixtures, or racemates

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 25 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)
G20 = 12



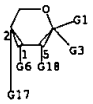
G24 = OMe
MPL: claim 1
NTE: additional ring formation allowed

L8 ANSWER 26 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 122:240340 MARPAT
TITLE: Preparation of psicofuranose and psicopyranose derivatives
INVENTOR(S): Terashima, Shiro; Katoh, Tadashi; Matsumoto, Miyoko
PATENT ASSIGNEE(S): Sagami Chemical Research Center, Japan
SOURCE: PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

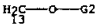
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9413685	A1	19940623	WO 1993-JP1796	19931210
W: US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 06172376	A2	19940621	JP 1992-352301	19921211
JP 3160105	B2	20010423		
EP 673947	A1	19950927	EP 1994-902104	19931210
EP 673947	B1	20000712		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AT 194622	E	20000715	AT 1994-902104	19931210
ES 2150479	T3	20001201	ES 1994-902104	19931210
PRIORITY APPLN. INFO.:			JP 1992-352301	19921211
			WO 1993-JP1796	19931210

OTHER SOURCE(S): CASREACT 122:240340
AB Title compds. I and II [R1,R2,R3,R4 = H, protecting group; X = (un)protected hydroxymethyl, carboxy, carbamoyl, etc.; R2R3 may also be [(di)alkyl]methylene; R5, R6, R7, R8 = H, protecting group], useful as key intermediates for hydantocidin (III), are prepd. E.g., 6-O-benzyl-1,2:3,4-di-O-isopropylidene-.beta.-D-psicofuranose in benzyl alc. was treated with CF3-SO3H, the resulting mixt. was stirred at room temp. for 2 h, and neutralized with concd. NH4OH to give I [R1 = benzyl, R2R3 = isopropylidene, R4 = benzyl, X = CH2OH].

MSTR 2



G1 = OH
G2 = COCMe3
G3 = 13



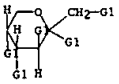
L8 ANSWER 26 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)
G6 = OH
G17 = OH
G18 = OH
MPL: claim 3

L8 ANSWER 27 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 122:56400 MARPAT
TITLE: Preparation of fatty acid monoesters of D-fructose for cosmetic use
INVENTOR(S): Philippe, Michael
PATENT ASSIGNEE(S): Oreal S. A., Fr.
SOURCE: Fr. Demande, 12 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2696467	A1	19940408	FR 1992-11770	19921005
FR 2696467	B1	19941104		
PRIORITY APPLN. INFO.:			FR 1992-11770	19921005

AB Title compds. were prepd. by esterification of D-fructose by RCO2CO2R1 [R = C7-21 alk(en)yl; R1 = alkyl]. Formulations comprising title compds. were given.

MSTR 5



G1 = (4) OH / (1) 16

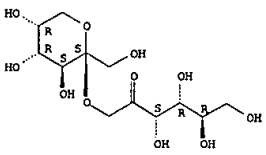
G2 = heptyl
MPL: claim 8

L5 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:631898 CAPLUS
DOCUMENT NUMBER: 133:221878
TITLE: Fructopyranosylfructose, sweetening agents containing it, manufacture of the sugar, and enzyme for it
INVENTOR(S): Nomura, Goro; Nishihara, Rikutaka; Yatake, Tsuneya
PATENT ASSIGNEE(S): Showa Sangyo Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000247991	A2	20000912	JP 1999-83508	19990326

PRIORITY APPLN. INFO.: JP 1998-373026 A 19981228
AB 1-O-.beta.-D-fructopyranosyl-D-fructose (I), useful as a low-calorie noncariogenic sweetener for foods and pharmaceuticals, is manufd. by treating diheterolevulosan II (II) with enzyme which hydrolyzes .alpha.-fructofuranoside bond of II. II (70 g) was treated with II-hydrolyzing enzyme of Bacillus sp. 56-7 at 45.degree. for 30 h to give 0.7 g I, which was not decompd. by digestive enzymes. A sweetener comprising 50 g I syrup and 50 g maltitol syrup showed sweetness 60 and similar taste with sucrose.
IT 292056-60-1P
RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(enzymic manuf. of fructopyranosylfructose as low-calorie noncariogenic sweeteners)
RN 292056-60-1 CAPLUS
CN D-Fructose, 1-O-.beta.-D-fructopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

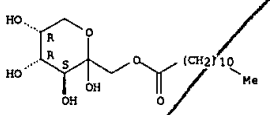


L5 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:388874 CAPLUS
DOCUMENT NUMBER: 133:26842
TITLE: Antibacterial agents containing sugar fatty acid esters for foods and dentifrices
INVENTOR(S): Watanabe, Takashi; Kuwahara, Masaaki; Katayama, Shihoko; Tomiya, Takahiko; Koshijima, Tetsuo
PATENT ASSIGNEE(S): Nippon Kagaku Kikai Seizo K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000159675	A2	20000613	JP 1998-339862	19981130

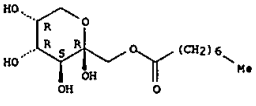
PRIORITY APPLN. INFO.: JP 1998-339862 19981130
AB Antibacterial agents contain C10-16 satd. fatty acid esters with fructose or galactose as active ingredients. Galactose laurate and fructose laurate strongly inhibited growth of Streptococcus mutant.
IT 20750-05-4P
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BUU (Biological use, unclassified); FFD (Food or feed use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(enzymic prepn. of sugar fatty acid esters as antibacterial agents for foods and dentifrices)
RN 20750-05-4 CAPLUS
CN D-Fructopyranose, 1-dodecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



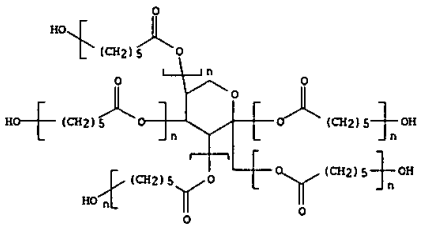
L5 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:193285 CAPLUS
DOCUMENT NUMBER: 132:333438
TITLE: Selective acylation of monosaccharides using microbial cells
AUTHOR(S): Molinari, Francesco; Bertolini, Cristina; Aragozzini, Fabrizio; Potenza, Donatella
CORPORATE SOURCE: Dipartimento di Scienze e Tecnologie Alimentari e Microbiologiche, Sezione Microbiologia Industriale, Universita degli Studi di Milano, Milan, 20133, Italy
SOURCE: Biocatalysis and Biotransformation (1999), 17(2), 95-102
CODEN: BOBOEQ; ISSN: 1024-2422
PUBLISHER: Harwood Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The microbially catalyzed esterification of different monosaccharides (glucose, alkyl glucosides and fructose) was investigated. Lyophilized cells of Rhizopus delemar and Rhizopus oryzae gave direct esterification of octanoic acid and glucose in acetonitrile furnishing 6-O-octanoylglucose. R. oryzae showed remarkable selectivity towards .beta.-glucose which was readily acylated, while little esterification was obsd. with the .alpha.-anomer. The effects of substrate concn., temp. and solvent were studied in the conversion catalyzed by R. oryzae with .beta.-glucose: 2.5 g L-1 of monoester were obtained starting from 5 g L-1 of glucose and 50 g L-1 of octanoic acid in acetonitrile at 50.degree.C. Interesterification was also studied. Tricaprylin proved to be a good acylating agent allowing 3.5 g L-1 of 6-O-octanoylglucose to be produced. Esterification of methyl- and octyl glucosides proceeded with interesting selectivity furnishing much higher yields with the .beta.-alkyl substrates. R. delemar and R. oryzae also catalyzed highly regioselective acylation of fructose with octanoic acid and tricaprylin, giving mono-octanoylfructose with yields ranging from 3.1 to 4.0 g L-1.
IT 268217-13-6P
RL: BPN (Biosynthetic preparation); PRP (Properties); BIOL (Biological study); PREP (Preparation)
(selective acylation of monosaccharides using microbial cells)
RN 268217-13-6 CAPLUS
CN .beta.-D-Fructopyranose, 1-octanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:315271 CAPLUS
DOCUMENT NUMBER: 129:4954
TITLE: Synthesis and physical properties of polyurethanes from saccharide-based polycaprolactones
AUTHOR(S): Hatakeyama, Hyoe; Izuta, Yoshinobu; Kobashigawa, Ken; Hirose, Shigeo; Hatakeyama, Tatsuko
CORPORATE SOURCE: Fukui University Technology, Fukui, 910, Japan
SOURCE: Macromolecular Symposia (1998), 130, 127-138
CODEN: MSYMEC; ISSN: 1022-1360
PUBLISHER: Huethig & Wepf Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Polyurethane (PU) sheets were prepd. from glucose-, fructose-, and sucrose-based polycaprolactones (PCL). The obtained saccharide-based PCL's were characterized by gel permeation chromatog., Fourier-transform IR spectroscopy, and NMR spectroscopy. The glass transition temp., thermal degrdn. temp., tensile strength, elongation, and Young's modulus of the PU sheets were measured. The obtained results suggest that the mol. motion of PU's is enhanced with increasing fraction of PCL chains in PU mols., and that at the same time the saccharide components act as hard segments.
IT 207300-95-6P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and phys. properties of polyurethanes from sugar-initiated polycaprolactones)
RN 207300-95-6 CAPLUS
CN Poly[oxy(1-oxo-1,6-hexanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with D-fructopyranose (5:1) (9CI) (CA INDEX NAME)

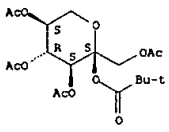


IT 207300-97-8P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and phys. properties of polyurethanes from sugar-initiated polycaprolactones)
RN 207300-97-8 CAPLUS
CN Poly[oxy(1-oxo-1,6-hexanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with D-fructopyranose (5:1), polymer with 1,1'-methylenebis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

CM 1

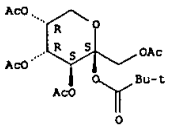
L5 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:204907 CAPLUS
DOCUMENT NUMBER: 108:204907
TITLE: Mass spectra of O-acetyl derivatives of 2-keto hexoses and their glycosides
AUTHOR(S): Lee, Cheang Kuan
CORPORATE SOURCE: Dep. Chem., Natl. Univ. Singapore, Kent Ridge, 0511, Singapore
SOURCE: Organic Mass Spectrometry (1987), 22(8), 553-6
CODEN: ORMSBG; ISSN: 0030-493X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Mass spectral data of acetylated keto pyranoses or pyranosides (11 compds.) and keto furanosides (3 compds.) are given and discussed.
IT **114388-89-5 114388-90-8**
RL: PRP (Properties)
(mass spectra of)
RN 114388-89-5 CAPLUS
CN .alpha.-L-Sorbopyranose, 1,3,4,5-tetraacetate 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 114388-90-8 CAPLUS
CN .beta.-D-Fructopyranose, 1,3,4,5-tetraacetate 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

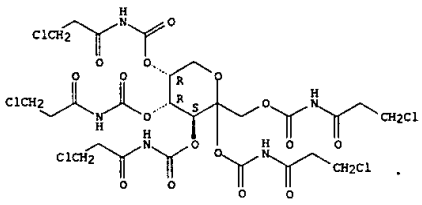


L5 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1971:13394 CAPLUS
DOCUMENT NUMBER: 74:13394
TITLE: Compounds containing carboxylic acid amide groups
PATENT ASSIGNEE(S): CIBA Ltd.
SOURCE: Brit., 9 pp.
CODEN: BRXXAA
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1193601		19700603		

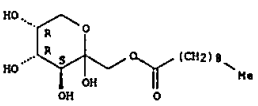
PRIORITY APPLN. INFO.: CH 19670927
AB The title compds., which are hardening agents for water-sol. polymers, esp. gelatin, are prepd. from polyfunctional OH compds. and haloalkyl isocyanates. Thus, 8.5 g .beta.-chloropropionyl isocyanate was added to 1.85 g glycerol in 50 ml ether and the mixt. stirred for 12 hr to give 5.4 g CH2QCHQCH2Q (Q = RCONHCO2) (I) (R = CH2CH2Cl) (II), m. 153.degree.. To 2.6 g II in 150 ml Me2CO was added 1.6 g Et3N at 15.degree., the mixt. was stirred for 12 hr, filtered, and 10 mg hydroquinone added to obtain 1.8 g I (R = CH:CH2). Similarly prepd. were I type compds. where R = CH2CH2Cl and glycerol was replaced by erythritol, D-fructose, D-xylitol, D-xylose, D-mannitol, and 90% sapond. high mol. wt. poly(vinyl alc.); or R = CH:CH2 and glycerol replaced by erythritol, D-fructose, and pentaerythritol.
IT **30649-66-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 30649-66-2 CAPLUS
CN Fructopyranose, pentakis[(3-chloropropionyl)carbamate], D- (8CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1968:467631 CAPLUS
DOCUMENT NUMBER: 69:67631
TITLE: Selective acylation of D-fructose: preparation of surface-active partial esters of fatty acids
AUTHOR(S): Reinefeld, E.; Klaudianos, S.
CORPORATE SOURCE: Tech. Hochsch. Braunschweig, Brunswick, Fed. Rep. Ger.
SOURCE: Zucker (1968), 21(9), 236-41
CODEN: ZUCKAF; ISSN: 0044-538X
DOCUMENT TYPE: Journal
LANGUAGE: German
AB Fatty acid esters of D-fructose (I) were prepd. and their surface active properties studied. Direct benzoylation was studied by dropwise addn. of BzCl in CHCl3 to I in pyridine at 4.degree. with stirring. Ratios of 0.5:1 to 5:1 were studied and 3:1 was found to give max. yield (37%) of the monoester 1-O-benozyl-D-fructopyranose the structure of which was detd. by prepn. from 2,3:4,5-di-O-isopropylidene-D-fructopyranose. Similarly, I was reacted with the acid chlorides of capric, lauric, myristic and palmitic acids to give 1-O-acyl (3:1 ratio) and 1,2-di-O-acyl derivs. (5:1 ratio). Pure compds. were sepd. on SiO2 using 9:1 C6H6-MeOH. The 1-O-lauryl deriv. was further reacted with Me2CO and sapond. to give 2,3:4,5-di-O-isopropylidene-D-fructopyranose. For the di-esters, the reaction mixts. were sepd. from the fatty acid in 66:23:11 EtOAc-iso-PrOH-H2O. Prepd. were 2,3-O-iso-propylidene-6-O-lauroyl-(23%), m. 82-3.degree. (petr. ether-acetone), [.alpha.]2D0 -30.4.degree. (c 0.25, CHCl3), 2,3-O-isopropylidene-1-O-lauroyl- (10%), m. 61-3.degree., [.alpha.]2D0 -15.degree., and 2,3-isopropylidene-1,6-di-O-lauroyl-D-fructofuranose (9%), m. 75-7.degree., [.alpha.] 2D0 -20.5.degree.. Hydrolysis gave 6-O-lauroyl-D-fructofuranose m. 86-8.degree., [.alpha.] 2D0 3.5.degree. (c 0.36, MeOH). The following were prepd. [% yield, m.p. (mono- from ether, di- from EtOAc), [.alpha.]2D0 (c in CHCl3), Rf (C6H6-MeOH, 4:1), and surface tension dynes/cm. 20.degree. for 0.001M aq. soln. given]: 1-O-acyl-D-fructopyranoses: caprate, 46, 83-5.degree., -57.6.degree., .fwdarw. -39.6.degree. (0.5), 0.36, 41:1; laurate, 50, 84-6.degree., -48.3.degree., .fwdarw. -31.6.degree. (1.0), 0.37, 27.8; myristate, 51, 85-7.degree.,-44.0.degree. .fwdarw. -30.4.degree. (0.5), 0.39, 28.0; palmitate 36, 91-3.degree., -48.7.degree. .fwdarw. -30.3.degree. (0.17 C5H5N), 0.41, 36.5. 1,2-Di-O-acyl-D-fructopyranoses: caprate, 39, 109-11.degree., -47.6.degree. .fwdarw. -35.6.degree. (0.25), 0.57, 29.7; laurate, 20, 113-15.degree., -43.2.degree. .fwdarw. -22.3.degree. (0.5), 0.62, 28.5; myristate, 14, 111-12.degree., -40.8.degree. .fwdarw. -31.2.degree. (0.5), 0.63, 29.4;palmitate 19, 115-17.degree., -35.9.degree. .fwdarw. -27.0.degree. (0.5), 0.63, 67.4.
IT **20750-04-3 20750-05-4 20750-06-5 20750-07-6 20750-08-7 20750-09-8 20814-82-8 20970-99-4**
RL: PRP (Properties)
(surface activity of)
RN 20750-04-3 CAPLUS
CN Fructopyranose, 1-decanoate, D- (8CI) (CA INDEX NAME)

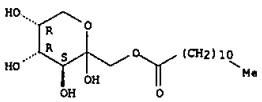
Absolute stereochemistry.



L5 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2003 ACS (Continued)

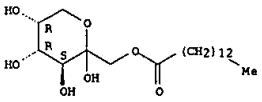
RN 20750-05-4 CAPLUS
CN D-Fructopyranose, 1-dodecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



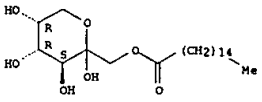
RN 20750-06-5 CAPLUS
CN Fructopyranose, 1-myristate, D- (8CI) (CA INDEX NAME)

Absolute stereochemistry.



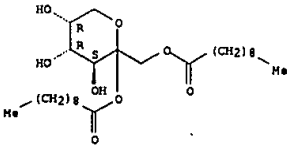
RN 20750-07-6 CAPLUS
CN Fructopyranose, 1-palmitate, D- (8CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 20750-08-7 CAPLUS
CN Fructopyranose, 1,2-didecanoate, D- (8CI) (CA INDEX NAME)

Absolute stereochemistry.

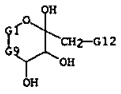


L8 ANSWER 17 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 129:230947 MARPAT
TITLE: Chemo-enzymic method for the production of oligosaccharides and their derivatives
INVENTOR(S): Fessner, Wolf-Dieter; Petersen, Michael; Papadopoulos, Michael Arthur; Osswald, Gerd
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9840390	A2	19980917	WO 1998-EP1096	19980226
WO 9840390	A3	19990114		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
DE 19709787	A1	19980917	DE 1997-19709787	19970311
AU 9868242	A1	19980929	AU 1998-68242	19980226
PRIORITY APPLN. INFO.:			DE 1997-19709787	19970311
			WO 1998-EP1096	19980226

AB The invention relates to novel oligosaccharides and the derivs. thereof in addn. to a general method for stereo divergent prodn. of oligosaccharides from easily accessible simple glycosides, wherein a further saccharide element is stereo selectably created from the aglycon constituent thereof by means of chain elongation reactions. This is achieved by (optional) chem. addn. of an aldehyde equiv. to a C=X-double bond in the aglycon, followed by diastereo-selective enzymic addn. of a nucleophile aldol donor to the glycosylated aldehyde in the presence of various stereo-specific aldolases. The resulting oligosaccharides, which carry an addnl. ketose unit on the reducing end when DHAP-dependent aldolases are used, and their corresponding phosphate esters and suitable derivs. thereof are useful as constituents of precursors for pharmaceutically active substances.

MSTR 1



G1 = CH2
G6 = alkylcarbonyl<(-7)>
G8 = OH

L8 ANSWER 17 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)
G9 = 24

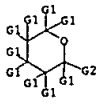
G12 = OH
DER: and pharmaceutically acceptable salts
MPL: claim 1

L8 ANSWER 18 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 128:244285 MARPAT
TITLE: Preparation of new benzamidine-pyranosides as leukotriene B4 receptor antagonists
INVENTOR(S): Anderskewitz, Ralf; Schromm, Kurt; Renth, Ernst-Otto; Birke, Franz; Jennewein, Hans Michael; Meade, Christopher John Montague; Ding, Andreas
PATENT ASSIGNEE(S): Boehringer Ingelheim International G.m.b.H., Germany; Boehringer Ingelheim Pharma K.-G.; Anderskewitz, Ralf; Schromm, Kurt; Renth, Ernst-Otto; Birke, Franz; Jennewein, Hans Michael; Meade, Christopher John Montague; Ding, Andreas
SOURCE: PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9811119	A1	19980319	WO 1997-EP4948	19970910
W: AU, BG, BR, BY, CA, CN, CZ, EE, HU, IL, JP, KR, KZ, LT, LV, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19637123	A1	19980319	DE 1996-19637123	19960912
AU 9746225	A1	19980402	AU 1997-46225	19970910
EP 931087	A1	19990728	EP 1997-944867	19970910
EP 931087	B1	20020403		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001500146	T2	20010109	JP 1998-513252	19970910
AT 215551	E	20020415	AT 1997-944867	19970910
ES 2174297	T3	20021101	ES 1997-944867	19970910
US 6197753	B1	20010306	US 1999-264649	19990308
PRIORITY APPLN. INFO.:			DE 1996-19637123	19960912
			WO 1997-EP4948	19970910

AB The present invention relates to novel pyranoside derivs., which are potent LTB4 receptor antagonists, process for the manuf. thereof and their use as pharmaceuticals (no data). Thus (I, R = H) was reacted with Me acetobromo-.alpha.-D-glucuronopyranoside to give I, R = (II).

MSTR 2



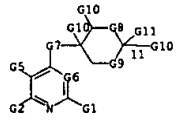
G1 = OH / CH2OH / alkylcarbonyloxy
G2 = OH
MPL: claim 4

L8 ANSWER 19 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 127:331498 MARPAT
TITLE: Substituted pyridines and pyrimidines as pest control agents
INVENTOR(S): Braun, Ralf; Schaper, Wolfgang; Knauf, Werner; Sanft, Ulrich; Kern, Manfred; Bonin, Werner
PATENT ASSIGNEE(S): Hoechst Schering Agrevo Gmbh, Germany
SOURCE: Ger. Offen., 30 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19613329	A1	19971009	DE 1996-19613329	19960403
CA 2250836	AA	19971016	CA 1997-2250836	19970324
WO 9737991	A1	19971016	WO 1997-EP1483	19970324
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, UZ, VN, YU				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9721597	A1	19971029	AU 1997-21597	19970324
EP 892798	A1	19990127	EP 1997-914297	19970324
R: DE, ES, FR, GB, IT				
JP 2000508636	T2	20000711	JP 1997-535788	19970324
US 6207668	B1	20010327	US 1997-829841	19970401
ZA 9702794	A	19971031	ZA 1997-2794	19970402
PRIORITY APPLN. INFO.:			DE 1996-19613329	19960403
			WO 1997-EP1483	19970324

AB Title compds. I [A = CH, N; X = O, S, SO, SO2; R = substituted satd. 5- or 6-membered O, S, or N heterocycle; R1 = H, ha logen, alkyl, haloalkyl, cycloalkyl; R2, R3 = H, (un)substituted aliph., alkoxy, alkylthio, acyl, cycloalkyl, trialkylsilyl, cyano, thiocyano, esterified CO2H; R2R3 = atoms required to complete a 5- or 6-membered ring] were prepd. for use as fungicides, insecticides, acaricides and ovicides. Thus, the pyrimidine II was prepd. by treating 4,5-dichloro-6-ethylpyrimidine with th amine which was prepd. from benzaldehyde and allyl bromide in 6 steps. II had insecticidal activity against Musca domestica at 300 ppm.

MSTR 1



G2 = alkylcarbonyl<(1-3)> (SO (1-) G12)
G7 = O
G8 = 25

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:631898 CAPLUS
DOCUMENT NUMBER: 133:221878
TITLE: Fructopyranosylfructose, sweetening agents containing it, manufacture of the sugar, and enzyme for it
INVENTOR(S): Nomura, Goro; Nishihara, Rikutaka; Yatake, Tsuneya
PATENT ASSIGNEE(S): Showa Sangyo Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000247991	A2	20000912	JP 1999-83508	19990326

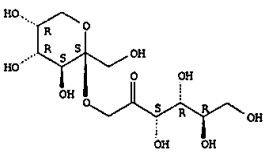
PRIORITY APPLN. INFO.: JP 1998-373026 A 19981228

AB 1-O-.beta.-D-fructopyranosyl-D-fructose (I), useful as a low-calorie noncariogenic sweetener for foods and pharmaceuticals, is manufd. by treating diheterolevulosan II (II) with enzyme which hydrolyzes .alpha.-fructofuranoside bond of II. II (70 g) was treated with II-hydrolyzing enzyme of Bacillus sp. 56-7 at 45.degree. for 30 h to give 0.7 g I, which was not decompd. by digestive enzymes. A sweetener comprising 50 g I syrup and 50 g maltitol syrup showed sweetness 60 and similar taste with sucrose.

IT **292056-60-1P**
RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(enzymic manuf. of fructopyranosylfructose as low-calorie noncariogenic sweeteners)

RN 292056-60-1 CAPLUS
CN D-Fructose, 1-O-.beta.-D-fructopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

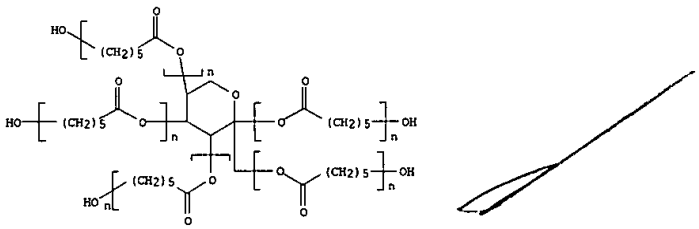


L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:315271 CAPLUS
DOCUMENT NUMBER: 129:4954
TITLE: Synthesis and physical properties of polyurethanes from saccharide-based polycaprolactones
AUTHOR(S): Hatakeyama, Hyoe; Izuta, Yoshinobu; Kobashigawa, Ken; Hirose, Shigeo; Hatakeyama, Tatsuko
CORPORATE SOURCE: Fukui University Technology, Fukui, 910, Japan
SOURCE: Macromolecular Symposia (1998), 130, 127-138
CODEN: MSYMEC; ISSN: 1022-1360
PUBLISHER: Huethig & Wepf Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Polyurethane (PU) sheets were prepd. from glucose-, fructose-, and sucrose-based polycaprolactones (PCL). The obtained saccharide-based PCL's were characterized by gel permeation chromatog., Fourier-transform IR spectroscopy, and NMR spectroscopy. The glass transition temp., thermal degrdn. temp., tensile strength, elongation, and Young's modulus of the PU sheets were measured. The obtained results suggest that the mol. motion of PU's is enhanced with increasing fraction of PCL chains in PU mols., and that at the same time the saccharide components act as hard segments.

IT **207300-95-6P**
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and phys. properties of polyurethanes from sugar-initiated polycaprolactones)

RN 207300-95-6 CAPLUS
CN Poly[oxy(1-oxo-1,6-hexanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with D-fructopyranose (5:1) (9CI) (CA INDEX NAME)



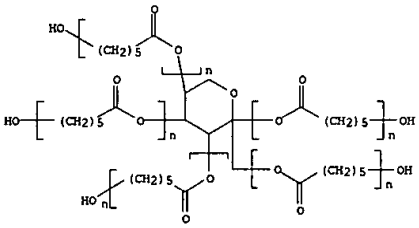
IT **207300-97-8P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and phys. properties of polyurethanes from sugar-initiated polycaprolactones)

RN 207300-97-8 CAPLUS
CN Poly[oxy(1-oxo-1,6-hexanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with D-fructopyranose (5:1), polymer with 1,1'-methylenebis[4-

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS (Continued)
isocyanatobenzene] (9CI) (CA INDEX NAME)

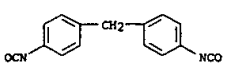
CM 1

CRN 207300-95-6
CMF (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n C6 H12 O6
CCI PMS
CDES 5:D-ARABINO



CM 2

CRN 101-68-8
CMF C15 H10 N2 O2



L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:135666 CAPLUS
DOCUMENT NUMBER: 124:202942
TITLE: Method for producing xylose-bonded oligosaccharides having activity of Bifidus growth factor by enzymic transglycosidation
INVENTOR(S): Fujita, Takateru; Kitaoka, Kumiko; Takahashi, Hideki; Kitahata, Sumio; Nakano, Hirobumi; Kondo, Masao; Taniguchi, Hajime; Hashimoto, Hitoshi
PATENT ASSIGNEE(S): Ensuiko Sugar Refining, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07278170	A2	19951024	JP 1994-92904	19940407

OTHER SOURCE(S): CASREACT 124:202942

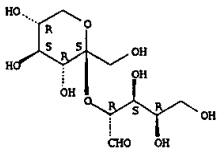
AB Oligosaccharides in which lactose, L-fucose, or L-sorbose is bonded to xylose through the .beta.-anomeric bond, more specifically oligosaccharides (I, II, and III; R = Q), which are useful as sweetening agents and materials for functional foods and drugs, are prepd. by reacting a liq. contg. an glucosylxylose (glycosyl donor substrate) with an aldose or ketose (receptor substrate), preferably lactose, L-fucose, or L-sorbose, in the presence of an enzyme having fructose transferring activity and/or yeast, preferably .beta.-fructofuranosidase derived from Arthrobacter sp. K-1. Thus, 50 g lactose and 50 g glucosylxyloside (2-O-.beta.-D-glucopyranosyl-D-xylose) were dissolved in a buffer soln. (pH 6.5), followed by adding .beta.-fructofuranosidase derived form Arthrobacter sp. (200 unit per 1 g glucosylxyloside) and 50 mg yeast (Saccharomyces cerevisiae) and making the total sugar concn. to 40 wt.%, and the resulting mixt. was allowed to react at 35.degree. with maintaining pH 6-7 to give a soln. contg. 58% lactosylxylose I. The soln. was heated for deactivating the enzyme and stopping the glucose utilization by the yeast, ultracentrifuged to remove the yeast, decolorized and desalted using activated charcoal and an ion exchange resin, and lyophilized to give 83 g I. I - III were utilized by Bifidobacterium but not easily utilized by other (potentially) harmful bacteria of human intestine, e.g Bacteroides, Clostridium, Eubacterium, Fusobacterium, Peptostreptococcus, Enterococcus, and Escherichia.

IT **174173-49-0P**
RL: BPN (Biosynthetic preparation); FFD (Food or feed use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of xylose-contg. oligosaccharides having activity of Bifidus growth factor as sweetening agents)

RN 174173-49-0 CAPLUS
CN D-Xylose, 2-O-.beta.-D-sorbopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS (Continued)



=> d ibib ab fqhit

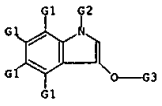
L7 ANSWER 1 OF 1 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 117:3817 MARPAT
TITLE: Substance determination using hydrogen peroxide produced during enzymic indigo formation
INVENTOR(S): Tsuji, Akio; Maeda, Masako; Arakawa, Hidetoshi
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 476930	A1	19920325	EP 1991-308338	19910912
EP 476930	B1	19971112		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
CA 2051144	AA	19920313	CA 1991-2051144	19910911
JP 04356200	A2	19921209	JP 1991-232999	19910912
AT 160177	E	19971115	AT 1991-308338	19910912
ES 2110979	T3	19980301	ES 1991-308338	19910912

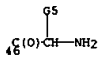
PRIORITY APPLN. INFO.: JP 1990-240018 19900912

AB A sensitive method for detn. of a substance comprises measuring the H2O2 producing during enzymic prodn. of indigo from an 3-O-indoxyl ester. An immunoassay for .alpha.-fetoprotein according to this method utilized anti-.alpha.-fetoprotein antibody-coated tubes and alk. phosphatase-anti-.alpha.-fetoprotein antibody conjugates. Chemiluminescence detection of the sample followed addn. of the indoxyl ester 5-bromo-4-chloro-3-indolyl phosphate, the luminescence reagent 2-cyclohexylaminoethane sulfonic acid, luminol, and microperoxidase. Levels as low as 1 ng .alpha.-fetoprotein/mL could be measured with good sensitivity by this technique.

MSTR 1



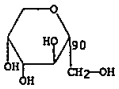
G2 = 46



46

G3 = 90

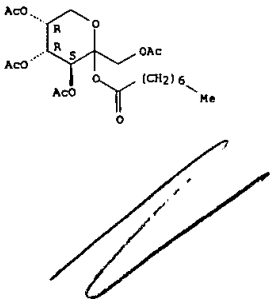
L7 ANSWER 1 OF 1 MARPAT COPYRIGHT 2002 ACS (Continued)



G5 = CH2CONH2
MPL: claim 20
NTE: fragment 24 represents galacto-, gluco-, and mannopyranose residues

=> d all

L7 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2002 ACS (Continued)



L7 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2002 ACS

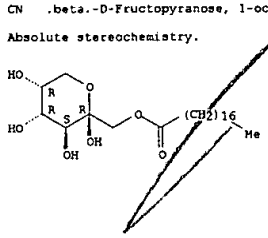
ACCESSION NUMBER: 1993:495927 CAPLUS
DOCUMENT NUMBER: 119:95927
TITLE: Lipase-catalyzed monoacylation of fructose
AUTHOR(S): Schlotterbeck, Andrea; Lang, Siegmund; Wray, Victor; Wagner, Fritz
CORPORATE SOURCE: Inst. Biochem. Biotechnol., Tech. Univ., Braunschweig, D-3300, Germany
SOURCE: Biotechnol. Lett. (1993), 15(1), 61-4
CODEN: BILED3; ISSN: 0141-5492
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 119:95927

AB In a one-pot-process the lipase-catalyzed monoacylation of fructose with stearic acid in n-hexane to give esters I and II was achieved when phenylboronic acid was used as solubilizing agent.

IT **148133-66-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 148133-66-8 CAPLUS
CN .beta.-D-Fructopyranose, 1-octadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2002 ACS

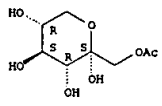
ACCESSION NUMBER: 1993:147893 CAPLUS
DOCUMENT NUMBER: 118:147893
TITLE: Enzymic regioselective acylation of hexoses and pentoses using oxime esters
AUTHOR(S): Pulido, Rosalino; Lopez Ortiz, Fernando; Gotor, Vincente
CORPORATE SOURCE: Fac. Quim., Univ. Oviedo, Oviedo, 33071, Spain
SOURCE: J. Chem. Soc., Perkin Trans. 1 (1992), (21), 2891-8
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 118:147893

AB Hexoses and pentoses have been acylated with Amano PS, and Candida antarctica (Novo SP435) lipases, using oxime esters RCO2N:CMe2 [R = Me, Pr, (CH2)8Me] as acyl donors. This method represents the first report of the enzymic acylation of free pentoses. The regioselectivity of the process depends on the structure of the starting material.

IT **146572-24-9P 146572-25-0P 146611-54-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

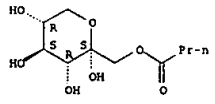
RN 146572-24-9 CAPLUS
CN .alpha.-D-Sorbopyranose, 1-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 146572-25-0 CAPLUS
CN .alpha.-D-Sorbopyranose, 1-butanoate (9CI) (CA INDEX NAME)

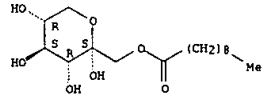
Absolute stereochemistry.



RN 146611-54-3 CAPLUS
CN .alpha.-D-Sorbopyranose, 1-decanoate (9CI) (CA INDEX NAME)

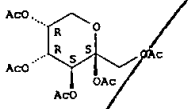
Absolute stereochemistry.

L7 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2002 ACS (Continued)



L7 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:689895 CAPLUS
DOCUMENT NUMBER: 133:363039
TITLE: Saccharide polymers, 4: synthesis and polymerization of 1,2-unsaturated fructopyranoid derivatives
AUTHOR(S): Glumer, Anke; Yaacoub, Emile-Joseph
CORPORATE SOURCE: Lehrstuhl fur Technologie der Kohlenhydrate, Technische Universitat Braunschweig, Braunschweig, D-38106, Germany
SOURCE: Macromol. Chem. Phys. (2000), 201(13), 1521-1531
CODEN: MCHPES; ISSN: 1022-1352
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Unsatd. fructopyranose derivs. like 2,6-anhydro-3,4,5-tri-O-benzoyl-1-desoxy-.beta.-D-arabino-hex-1-enopyranose (3) and 2,6-anhydro-3,4,5-tri-O-acetyl-1-desoxy-.beta.-D-arabino-hex-1-enopyranose (6), briefly called "Bz-exo-fructal" (3) and "Ac-exo-fructal" (6), were synthesized. These sugar monomers, which are exo-cyclic vinyl ethers, were investigated in polymn. reactions. The corresponding "saccharide polymers", homo- and copolymers, were synthesized under free radical conditions. The structure and compn. of the "saccharide polymers" were detd. by elemental anal., 1H and 13C NMR, and FT-IR spectroscopy. Characterization and properties of the various polymers in terms of mol. wt., optical rotation, and glass transition temp. are reported.
IT **20764-61-8P**
RL: BYP (Byproduct); FMU (Formation, unclassified); FORM (Formation, nonpreparative); PREP (Preparation)
(formation of)
RN 20764-61-8 CAPLUS
CN .beta.-D-Fructopyranose, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



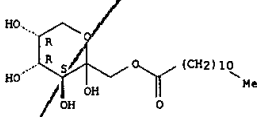
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:388874 CAPLUS
DOCUMENT NUMBER: 133:26842
TITLE: Antibacterial agents containing sugar fatty acid esters for foods and dentifrices
INVENTOR(S): Watanabe, Takashi; Kuwahara, Masaaki; Katayama, Shihoko; Tomiya, Takahiko; Koshijima, Tetsuo
PATENT ASSIGNEE(S): Nippon Kagaku Kikai Seizo K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000159675	A2	20000613	JP 1998-339862	19981130

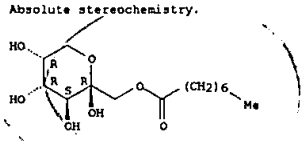
AB Antibacterial agents contain C10-16 satd. fatty acid esters with fructose or galactose as active ingredients. Galactose laurate and fructose laurate strongly inhibited growth of Streptococcus mutant.
IT **20750-05-4P**
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BUU (Biological use, unclassified); FFD (Food or feed use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(enzymic prepn. of sugar fatty acid esters as antibacterial agents for foods and dentifrices)
RN 20750-05-4 CAPLUS
CN D-Fructopyranose, 1-dodecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:193285 CAPLUS
DOCUMENT NUMBER: 132:333438
TITLE: Selective acylation of monosaccharides using microbial cells
AUTHOR(S): Molinari, Francesco; Bertolini, Cristina; Aragozzini, Fabrizio; Potenza, Donatella
CORPORATE SOURCE: Dipartimento di Scienze e Tecnologie Alimentari e Microbiologiche, Sezione Microbiologia Industriale, Universita degli Studi di Milano, Milan, 20133, Italy
SOURCE: Biocatal. Biotransform. (1999), 17(2), 95-102
CODEN: BOBOEQ; ISSN: 1024-2422
PUBLISHER: Harwood Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The microbially catalyzed esterification of different monosaccharides (glucose, alkyl glucosides and fructose) was investigated. Lyophilized cells of Rhizopus delemar and Rhizopus oryzae gave direct esterification of octanoic acid and glucose in acetonitrile furnishing 6-O-octanoylglucose. R. oryzae showed remarkable selectivity towards .beta.-glucose which was readily acylated, while little esterification was obsd. with the .alpha.-anomer. The effects of substrate concn., temp. and solvent were studied in the conversion catalyzed by R. oryzae with .beta.-glucose: 2.5 g L-1 of monoester were obtained starting from 5 g L-1 of glucose and 50 g L-1 of octanoic acid in acetonitrile at 50.degree.C. Interesterification was also studied. Tricaprylin proved to be a good acylating agent allowing 3.5 g L-1 of 6-O-octanoylglucose to be produced. Esterification of methyl- and octyl glucosides proceeded with interesting selectivity furnishing much higher yields with the .beta.-alkyl substrates. R. delemar and R. oryzae also catalyzed highly regioselective acylation of fructose with octanoic acid and tricaprylin, giving mono-octanoylfructose with yields ranging from 3.1 to 4.0 g L-1.
IT **268217-13-6P**
RL: BPN (Biosynthetic preparation); PRP (Properties); BIOL (Biological study); PREP (Preparation)
(selective acylation of monosaccharides using microbial cells)
RN 268217-13-6 CAPLUS
CN .beta.-D-Fructopyranose, 1-octanoate (9CI) (CA INDEX NAME)

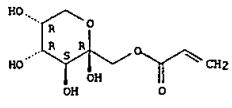
Absolute stereochemistry.



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:815221 CAPLUS
DOCUMENT NUMBER: 132:152032
TITLE: Synthesis of unsaturated monosaccharide esters
AUTHOR(S): Slivkin, A. I.; Lapenko, V. L.
CORPORATE SOURCE: Voronezh. Gos. Univ., Russia
SOURCE: Izv. Vyssh. Uchebn. Zaved., Khim. Khim. Tekhnol. (1999), 42(1), 112-117
CODEN: IVUKAR; ISSN: 0579-2991
PUBLISHER: Ivanovskii Gosudarstvennyi Khimiko-Tekhnologicheskii Universitet
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 132:152032
AB Methacryloyl-O-glycosides of D-glucose and D-mannose were prepd. by acylation of diboronate monosaccharides followed by selective methanolysis. 3-Acryloyl-D-glucose, 1-acryloyl-L-sorbose, 1-acryloyl-D-mannose have been synthesized via acylation of the corresponding diisopropylidene derivs. of monosaccharides followed by hydrolysis with cationite.
IT **257282-80-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of unsatd. monosaccharide esters using acylation)
RN 257282-80-7 CAPLUS
CN .beta.-D-Fructopyranose, 1-(2-propenoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

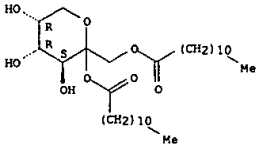


=> d ibib ab hitstr 1-3

=> d ibib ab hitstr

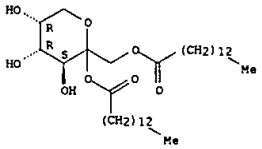
L7 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 20750-09-8 CAPLUS
CN Fructopyranose, 1,2-dilaurate, D- (8CI) (CA INDEX NAME)

Absolute stereochemistry.



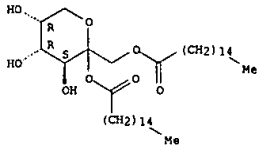
RN 20814-82-8 CAPLUS
CN Fructopyranose, 1,2-dimyristate, D- (8CI) (CA INDEX NAME)

Absolute stereochemistry.

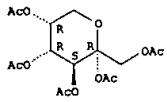


RN 20970-99-4 CAPLUS
CN Fructopyranose, 1,2-dipalmitate, D- (8CI) (CA INDEX NAME)

Absolute stereochemistry.

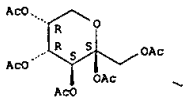


L7 ANSWER 25 OF 25 CAPLUS COPYRIGHT 2002 ACS (Continued)



L7 ANSWER 25 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1968:452429 CAPLUS
DOCUMENT NUMBER: 69:52429
TITLE: Application of 14C isotope in studies on the lability of sugar substituents
AUTHOR(S): Swiderski, J.; Blicharski, P.; Ostalska, K.; Pawlak, Z.; Strucinski, J.; Temeriusz, A.; Siarkiewicz, E.; Skup, A.; Piorkowska, M.
CORPORATE SOURCE: Univ. Warszawski, Warsaw, Poland
SOURCE: Nukleonika, Supl. (1966), Volume Date 1965, 10 347-52
CODEN: NUKSAF
DOCUMENT TYPE: Journal
LANGUAGE: Polish
AB The exchange of acetyl groups occured when fully acetylated aldoses were heated with Me14CO2H (I) at 117.degree. without any catalyst. More than 90% of the total radioactivity of products was found in C-1 acetyl groups. The exchange took place without inversion, the optical rotation remained const. in the course of the reaction. In expts. with penta-O-acetyl-D-glucopyranose and octa-O-acetyl-D-cellobiose, the radioactivity of .beta.-D anomers exceeded 10-40 times that of .alpha.-D anomers. Hence, in the D-glucose series the mobility of acetyl groups at the anomeric C was much higher in 1,2-trans isomers than in 1,2-cis ones. This difference was less evident in D-galactose series where the degree of acetyl group exchange in the .beta.-D anomer of penta-O-acetyl-D-galactopyranose was only twice as high as the value found for the .alpha.-D anomer. No exchange took place in penta-O-acetyl-keto-D-fructose suggesting that in the open-chain form the high polarizability of the carbonyl group of the ketose completely prevented heterolysis and dissocn. of neighboring acetoxy anions. Heating penta-O-acetyl-.alpha.-D-fructopyranose (II) with I resulted in acetyl group exchange coupled with anomerization. The newly formed .beta.-D anomer was highly radioactive. A mechanism of anomerization was proposed.
IT **20764-61-8 20764-62-9**
RL: PRP (Properties)
(exchange of acetyl groups in)
RN 20764-61-8 CAPLUS
CN .beta.-D-Fructopyranose, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



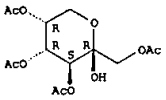
RN 20764-62-9 CAPLUS
CN Fructopyranose, pentaacetate, .alpha.-D- (8CI) (CA INDEX NAME)

Absolute stereochemistry.

=> d ibib ab hitstr 1-25

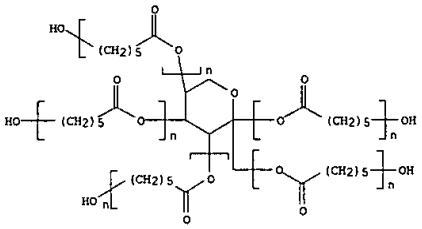
L7 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:774807 CAPLUS
DOCUMENT NUMBER: 132:208014
TITLE: Synthesis of 6-deoxy-6-iodo-D-fructose
AUTHOR(S): Fellahi, M.; Morin, C.
CORPORATE SOURCE: BP 53X, Batiment 52 Chimie Recherche, UMR CNRS 5616, LEDSS, Groupe des Marqueurs Biomedicaux, Universite de Grenoble, Grenoble, F-38041, Fr.
SOURCE: Carbohydr. Res. (1999), 322(1-2), 142-146
CODEN: CRBRAT; ISSN: 0008-6215
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB 6-Deoxy-6-iodo-D-fructose was prepd. from D-fructose by a three-step sequence involving partial acetylation, iodination to yield an acyclic D-arabino-hex-2-ulose deriv., followed by deprotection of the acetates. Structures were confirmed by simulation of 1H NMR spectra.
IT **55221-54-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(Synthesis of 6-deoxy-6-iodo-D-fructose from D-fructose via acetylation and iodination)
RN 55221-54-0 CAPLUS
CN .beta.-D-Fructopyranose, 1,3,4,5-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:315271 CAPLUS
DOCUMENT NUMBER: 129:4954
TITLE: Synthesis and physical properties of polyurethanes from saccharide-based polycaprolactones
AUTHOR(S): Hatakeyama, Hyoe; Izuta, Yoshinobu; Kobashigawa, Ken; Hirose, Shigeo; Hatakeyama, Tatsuko
CORPORATE SOURCE: Fukui University Technology, Fukui, 910, Japan
SOURCE: Macromol. Symp. (1998), 130, 127-138
CODEN: MSYMEC; ISSN: 1022-1360
PUBLISHER: Huethig & Wepf Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Polyurethane (PU) sheets were prepd. from glucose-, fructose-, and sucrose-based polycaprolactones (PCL). The obtained saccharide-based PCL's were characterized by gel permeation chromatog., Fourier-transform IR spectroscopy, and NMR spectroscopy. The glass transition temp., thermal degrdn. temp., tensile strength, elongation, and Young's modulus of the PU sheets were measured. The obtained results suggest that the mol. motion of PU's is enhanced with increasing fraction of PCL chains in PU mols., and that at the same time the saccharide components act as hard segments.
IT **207300-95-6P**
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and phys. properties of polyurethanes from sugar-initiated polycaprolactones)
RN 207300-95-6 CAPLUS
CN Poly[oxy(1-oxo-1,6-hexanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with D-fructopyranose (5:1) (9CI) (CA INDEX NAME)

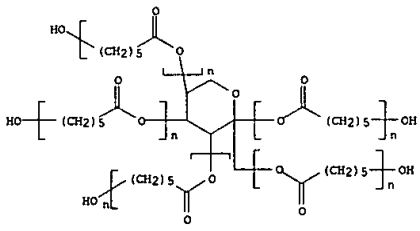


IT **207300-97-8P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and phys. properties of polyurethanes from sugar-initiated polycaprolactones)
RN 207300-97-8 CAPLUS
CN Poly[oxy(1-oxo-1,6-hexanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with D-fructopyranose (5:1), polymer with 1,1'-methylenebis[4-

L7 ANSWER 6 OF 25 CAPLUS COPYRIGHT 2002 ACS (Continued)
isocyanatobenzene] (9CI) (CA INDEX NAME)

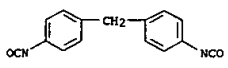
CM 1

CRN 207300-95-6
CMF (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n C6 H12 O6
CCI PMS
CDES 5:D-ARABINO



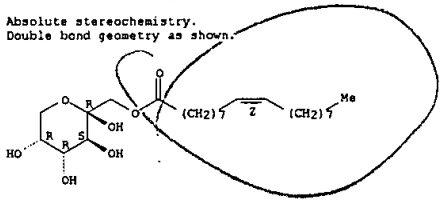
CM 2

CRN 101-68-8
CMF C15 H10 N2 O2



L7 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:305175 CAPLUS
DOCUMENT NUMBER: 129:17255
TITLE: Structure and surface-active property determinations of fructose monooleates
AUTHOR(S): Jung, S.; Coulon, D.; Girardin, M.; Ghoul, M.
CORPORATE SOURCE: LSGC-ENSAIA, Vandoeuvre-les-Nancy, 54500, Fr.
SOURCE: J. Surfactants Deterg. (1998), 1(1), 53-57
CODEN: JSDEFL; ISSN: 1097-3958
PUBLISHER: AOCS Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The enzymic synthesis of fructose monooleates led to a mixt. of four isomers (.alpha. and .beta. anomers of 6-fructofuranose and .beta. anomers of 1-fructofuranose and 1-fructopyranose). Surface and interfacial tension, foaming, and emulsifying properties were detd. and compared to those of alkylpolyglycosides, sorbitan oleate, and sodium dodecyl sulfate. Fructose monooleates promoted a significant decrease in both surface and interfacial tension, even at low concn. The crit. micelle concn. of fructose monooleates was detd. as 2.4 .cntdot. 10-4 M. The foam produced by an aq. soln. of fructose monooleates was very stable, indicating that a high energy was needed to desorb these mols. from the interface. Moreover, this biosurfactant exhibited very good emulsion stabilization. The emulsifying power of these mols. was higher than that of sorbitan oleate.
IT **164858-25-7**
RL: PRP (Properties)
(structure and surfactant properties of fructose monooleates)
RN 164858-25-7 CAPLUS
CN .beta.-D-Fructopyranose, 1-[(9Z)-9-octadecenoate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



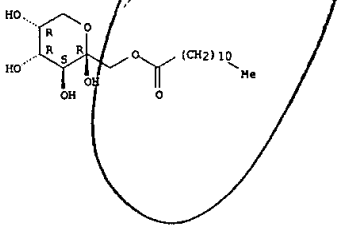
L7 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:800185 CAPLUS
DOCUMENT NUMBER: 128:89061
TITLE: Quantitative enzymic production of 1,6-diacyl fructofuranoses
AUTHOR(S): Arcos, J. A.; Bernabe, M.; Otero, Cristina
CORPORATE SOURCE: Instituto de Catalisis, CSIC, Madrid, 28049, Spain
SOURCE: Enzyme Microb. Technol. (1998), 22(1), 27-35
CODEN: EMTED2; ISSN: 0141-0229
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Three different 1,6-diacyl fructofuranoses have been prepd. enzymically. At low temp. (5.degree.C), the synthesis produces quant. yields of the diester by simple addn. of the original sugar to a soln. of the fatty acid in a solvent (acetone) which is accepted by the EEC for use in the manuf. of food additives. A strategy to reduce the reaction times is also reported. The method is not limited by the low soly. of the sugar in the medium. In contrast with alternative enzymic methods, the indicated method minimizes the solvent/sugar ratio. The stability of the biocatalyst (Novozym 435) is high relative to the required reaction time.

IT **201004-36-6P**
RL: BPN (Biosynthetic preparation); PRP (Properties); BIOL (Biological study); PREP (Preparation)
(quant. enzymic prodn. of diacyl fructofuranoses)

RN 201004-36-6 CAPLUS
CN .beta.-D-Fructopyranose, 1-dodecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:469594 CAPLUS
DOCUMENT NUMBER: 125:118089
TITLE: Use of combinations of activators for inorganic peroxy acids in bleaching and disinfecting compositions
INVENTOR(S): Wilde, Andreas; Liphard, Maria; Kuester, Harald; Pegelow, Ulrich; Hill, Karlheinz; Junkes, Christian; Block, Christian
PATENT ASSIGNEE(S): Henkel Kgaa, Germany
SOURCE: Ger. Offen., 8 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4443177	A1	19960613	DE 1994-4443177	19941205
WO 9617920	A1	19960613	WO 1995-EP4663	19951127

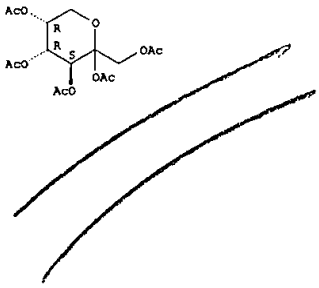
W: JP, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
PRIORITY APPLN. INFO.: DE 1994-4443177 19941205
OTHER SOURCE(S): MARPAT 125:118089

AB Activator combinations which provide long- and short-chain peroxy acids [e.g., N-nonanoylsuccinimide and (Ac2NCH2)2, resp.] are useful in compns. [e.g., laundry detergents] contg. inorg. peroxy acids (e.g., Na perborate monohydrate).

IT **6866-50-8**, Fructose pentaacetate
RL: MOA (Modifier or additive use); USES (Uses)
(in mixts. of activators for peroxygen bleaching agents)

RN 6866-50-8 CAPLUS
CN Fructopyranose, pentaacetate (7CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.



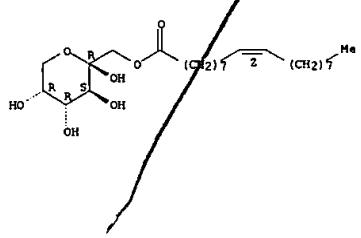
L7 ANSWER 10 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:487484 CAPLUS
DOCUMENT NUMBER: 123:56400
TITLE: Comparison of direct esterification and transesterification of fructose by Candida antarctica lipase
AUTHOR(S): Coulon, D.; Girardin, M.; Rovel, B.; Ghoul, M.
CORPORATE SOURCE: Groupe Lipoprocedes l'INPL, E.N.S.A.I.A., Vandoeuvre les Nancy, 54500, Fr.
SOURCE: Biotechnol. Lett. (1995), 17(2), 183-6
CODEN: BILED3; ISSN: 0141-5492
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Fructose oleates synthesis was performed in a batch reactor by trans- or direct esterification. An immobilized lipase from Candida antarctica was used. When a solvent was used, 65% and 46% of conversion of fructose were obtained by transesterification and direct esterification, resp. These two reactions were also compared in a solvent-free melt. Both in molten media and with cosolvent, two isomeric forms of fructose oleates were produced.

IT **164858-25-7P**
RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)
(comparison of direct esterification and transesterification of fructose by Candida antarctica lipase)

RN 164858-25-7 CAPLUS
CN .beta.-D-Fructopyranose, 1-[(9Z)-9-octadecenoate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L7 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:54886 CAPLUS
DOCUMENT NUMBER: 120:54886
TITLE: Preparation of sugar esters useful as peroxy acid bleach precursors
INVENTOR(S): Thornthwaite, David William
PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever N. V.
SOURCE: Eur. Pat. Appl., 10 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 540279	A1	19930505	EP 1992-309799	19921026
R: CH, DE, ES, FR, GB, IT, LI, NL, SE				
CA 2081284	AA	19930430	CA 1992-2081284	19921023
BR 9204172	A	19930504	BR 1992-4172	19921027
JP 06065274	A2	19940308	JP 1992-290367	19921028
ZA 9208368	A	19940429	ZA 1992-8368	19921029

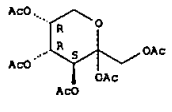
PRIORITY APPLN. INFO.: GB 1991-22910 19911029

AB The title process involves reacting a fully acetylated sugar with a carboxylic acid other than AcOH in the presence of a catalyst to give 1-acyl substituted acetylated sugars which are useful as peroxy acid bleach precursors (no data). Thus, pentaacetyl glucose was heated at 120-130.degree. with approx. a 20% excess of octanoic acid in the presence of 5 wt.% ZnCl2 to give 93% 1-octanoyl-2,3,4,6-tetraacetylglucose.

IT **7770-66-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of and synthesis of sugar ester peroxy acid bleach precursor)

RN 7770-66-3 CAPLUS
CN D-Fructopyranose, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **151664-12-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as sugar ester peroxy acid bleach precursor)

RN 151664-12-9 CAPLUS
CN D-Fructopyranose, 1,3,4,5-tetraacetate 2-octanoate (9CI) (CA INDEX NAME)

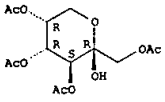
Absolute stereochemistry.

L7 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1981:425551 CAPLUS
DOCUMENT NUMBER: 95:25551
TITLE: Alkyl ketohexopyranoside derivatives
INVENTOR(S): Noda, Kanji; Nakagawa, Akira; Haraguchi, Yasushi; Ueda, Koichiro; Hirano, Munehiko; Nishioka, Itsuo; Yagi, Akira; Koda, Akihide; Ide, Hiroyuki
PATENT ASSIGNEE(S): Hisamitsu Pharmaceutical Co., Inc., Japan
SOURCE: Ger. Offen., 31 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3019221	A1	19801204	DE 1980-3019221	19800520
JP 55154991	A2	19801202	JP 1979-64769	19790523
GB 2052485	A	19810128	GB 1980-16078	19800515
GB 2052485	B2	19830407		
US 4395405	A	19830726	US 1980-150129	19800515
CA 1141761	A1	19830222	CA 1980-352274	19800520
SE 8003815	A	19801124	SE 1980-3815	19800521
AU 8058615	A1	19801127	AU 1980-58615	19800521
AU 529742	B2	19830616		
FR 2457300	A1	19801219	FR 1980-11361	19800521
FR 2457300	B1	19830624		
NL 8002981	A	19801125	NL 1980-2981	19800522
ES 492194	A1	19810401	ES 1980-492194	19800522
ZA 8003076	A	19810624	ZA 1980-3076	19800522
SU 978732	A3	19821130	SU 1980-2928971	19800522
CH 647531	A	19850131	CH 1980-4014	19800522
AT 8002788	A	19820315	AT 1980-2788	19800523
AT 368755	B	19821110		

PRIORITY APPLN. INFO.: JP 1979-64769 19790523
AB Ketohexopyranosides I (R = .gtoreq.C3 alkyl) were prepd. Thus, 10 g D-fructose was treated with 410 g BuOH, contg. 0.2% HCl, to give 3.7 g Bu .beta.-D-fructopyranoside (II). At 100 mg/kg day for 5 days orally in rats II generated an antibody titer of 84.4, compared with cyclophosphamide 16.0.
IT **55221-54-0**
RL: RCT (Reactant)
(alkylation of)
RN 55221-54-0 CAPLUS
CN .beta.-D-Fructopyranose, 1,3,4,5-tetraacetate (9CI) (CA INDEX NAME)

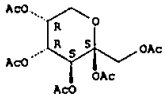
Absolute stereochemistry.



L7 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2002 ACS (Continued)

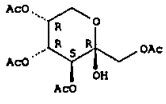
L7 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1975:125531 CAPLUS
DOCUMENT NUMBER: 82:125531
TITLE: Conformation of some simple D-fructose derivatives
AUTHOR(S): De Bruyn, A.; Anteunis, M.; Verhegge, G.
CORPORATE SOURCE: Dep. Org. Chem., State Univ. Gent, Ghent, Belg.
SOURCE: Bull. Soc. Chim. Belg. (1974), 83(11-12), 475-6
CODEN: BSCBAG
DOCUMENT TYPE: Journal
LANGUAGE: English
AB I (R1 = Ac, R2 = Ac, H, Me; R1 = H, R2 = Me) were prepd. and exist in the 2C5(D) conformation as detd. by NMR. Coupling consts and chem. shifts of I were given.
IT **20764-61-8 55221-54-0**
RL: PRP (Properties)
(conformation of, NMR in relation to)
RN 20764-61-8 CAPLUS
CN .beta.-D-Fructopyranose, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



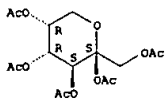
RN 55221-54-0 CAPLUS
CN .beta.-D-Fructopyranose, 1,3,4,5-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1974:505823 CAPLUS
DOCUMENT NUMBER: 81:105823
TITLE: Carbon-hydrogen stretching vibrational spectra of sugar acetates
AUTHOR(S): Morita, Koichi
CORPORATE SOURCE: Res. Lab., Chugai Pharm. Co., Ltd., Tokyo, Japan
SOURCE: Yakugaku Zasshi (1974), 94(6), 739-43
CODEN: YKKZAJ
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Ir spectra of acetylated pyranoses in CCl4 were measured precisely in CH stretching vibrational region, and absorptions were assigned by comparing with those of related compds. .beta.-Anomers show characteristic bands at about 2940 and 2875 .+-. 5 cm-1. While the former band was obsd. only in acetates, the latter appeared in all the .beta.-anomers examd. and was assigned to axial-C-1-H stretching vibration. The configuration dependence of the position and no. of the bands was discussed based on the similarity obsd. in hexachlorocyclohexane isomers.
IT **20764-61-8**
RL: RCT (Reactant)
(carbon-hydrogen vibrational stretching of)
RN 20764-61-8 CAPLUS
CN .beta.-D-Fructopyranose, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



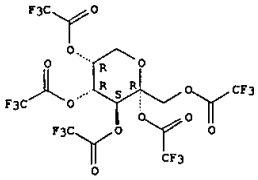
L7 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1973:479073 CAPLUS
DOCUMENT NUMBER: 79:79073
TITLE: Gas chromatography and mass spectrometry of trifluoroacetylated carbohydrates
AUTHOR(S): Koenig, Wilfried A.; Bauer, Hermann; Voelter, Wolfgang; Bayer, Ernst
CORPORATE SOURCE: Chem. Inst., Univ. Tuebingen, Tuebingen, Ger.
SOURCE: Chem. Ber. (1973), 106(6), 1905-19
CODEN: CHBEAM
DOCUMENT TYPE: Journal
LANGUAGE: German

AB The trifluoroacetyl (TFA) derivs. of sugars were synthesized in microgram scale and subsequently identified by gas chromatog. and mass spectrometry. The mass spectra showed easily interpretable fragmentation pathways. Aldoses, ketoses, furanoses, and pyranoses were distinguished by a no. of intense fragment ions in the high mass range. Because of the high volatility, the TFA derivs. were well suited for gas chromatog. detn. In most cases, the equil. of anomers was not affected by the formation of the TFA derivs. The fragmentations of the TFA derivs. of deoxysugars, Me glycosides, and disaccharides on electron impact are discussed.

IT **49706-37-8**
RL: PRP (Properties)
(gas chromatog. and mass spectroscopy of)

RN 49706-37-8 CAPLUS
CN .alpha.-D-Fructopyranose, pentakis(trifluoroacetate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



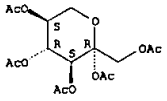
L7 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1969:481667 CAPLUS
DOCUMENT NUMBER: 71:81667
TITLE: Sorboses XV. 1,3-O-benzylidene-L-sorbose
AUTHOR(S): Maeda, Takashi; Kimoto, Mitsuru; Wakahara, Shigeru; Tokuyama, Kanji
CORPORATE SOURCE: Res. Lab., Shionogi and Co., Ltd., Osaka, Japan
SOURCE: Bull. Chem. Soc. Jap. (1969), 42(7), 2021-8
CODEN: BCSJA8
DOCUMENT TYPE: Journal
LANGUAGE: English

AB 1,3-O-Benzylidene-L-sorbose (I) exists as an equil. mixt. of a pyranose form (Ip), a keto-form (Ik), and a furanose form (If) in soln. The acetylation of I in pyridine at low temp. afforded the acetates of If; one of them is in keto-form in the cryst. state. The acetates of If and Ip are formed at higher temp. When a pyridine solution of I was kept for some time before acetylation, the yield of the acetate of Ip increased. The recrystn. of I usually gave crystals of If, however, while the addn. of petroleum ether to the concd. pyridine soln. of I afforded a powder which consisted mainly of Ip. These results suggest that I exists as If in a cryst. state and as an equil. mixt. of If, Ik, and Ip in soln.; the existence of this equil. was also confirmed by 1H N.M.R. spectroscopy.

IT **25019-52-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 25019-52-7 CAPLUS
CN Sorbopyranose, pentaacetate, .beta.-L- (8CI) (CA INDEX NAME)

Absolute stereochemistry.



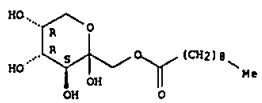
L7 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1968:467631 CAPLUS
DOCUMENT NUMBER: 69:67631
TITLE: Selective acylation of D-fructose: preparation of surface-active partial esters of fatty acids
AUTHOR(S): Reinefeld, E.; Klaudianos, S.
CORPORATE SOURCE: Tech. Hochsch. Braunschweig, Brunswick, Ger.
SOURCE: Zucker (1968), 21(9), 236-41
CODEN: ZUCKAF
DOCUMENT TYPE: Journal
LANGUAGE: German

AB Fatty acid esters of D-fructose (I) were prepd. and their surface active properties studied. Direct benzoylation was studied by dropwise addn. of BzCl in CHCl3 to I in pyridine at 4.degree. with stirring. Ratios of 0.5:1 to 5:1 were studied and 3:1 was found to give max. yield (37%) of the monoester 1-O-benozyl-D-fructopyranose the structure of which was detd. by prepn. from 2,3:4,5-di-O-isopropylidene-D-fructopyranose. Similarly, I was reacted with the acid chlorides of capric, lauric, myristic and palmitic acids to give 1-O-acyl (3:1 ratio) and 1,2-di-O-acyl derivs. (5:1 ratio). Pure compds. were sepd. on SiO2 using 9:1 C6H6-MeOH. The 1-O-lauryl deriv. was further reacted with Me2CO and sapond. to give 2,3:4,5-di-O-isopropylidene-D-fructopyranose. For the di-esters, the reaction mixts. were sepd. from the fatty acid in 66:23:11 EtOAc-iso-PrOH-H2O. Prepd. were 2,3-O-iso-propylidene-6-O-lauroyl-(23%), m. 82-3.degree. (petr. ether-acetone), [.alpha.]2D0 -30.4.degree. (c 0.25, CHCl3), 2,3-O-isopropylidene-1-O-lauroyl- (10%), m. 61-3.degree., [.alpha.]2D0 -15.degree., and 2,3-isopropylidene-1,6-di-O-lauroyl-D-fructofuranose (9%), m. 75-7.degree., [.alpha.] 2D0 -20.5.degree.. Hydrolysis gave 6-O-lauroyl-D-fructofuranose m. 86-8.degree., [.alpha.] 2D0 3.5.degree. (c 0.36, MeOH). The following were prepd. [% yield, m.p. (mono- from ether, di- from EtOAc), [.alpha.]2D0 (c in CHCl3), Rf (C6H6-MeOH, 4:1), and surface tension dynes/cm. 20.degree. for 0.001M aq. soln. given]: 1-O-acyl-D-fructopyranoses: caprate, 46, 83-5.degree., -57.6.degree., .fwdarw. -39.6.degree. (0.5), 0.36, 41:1; laurate, 50, 84-6.degree., -48.3.degree., .fwdarw. -31.6.degree. (1.0), 0.37, 27.8; myristate, 51, 85-7.degree.,-44.0.degree. .fwdarw. -30.4.degree. (0.5), 0.39, 28.0; palmitate 36, 91-3.degree., -48.7.degree. .fwdarw. -30.3.degree. (0.17 C5H5N), 0.41, 36.5. 1,2-Di-O-acyl-D-fructopyranoses: caprate, 39, 109-11.degree., -47.6.degree. .fwdarw. -35.6.degree. (0.25), 0.57, 29.7; laurate, 20, 113-15.degree., -43.2.degree. .fwdarw. -22.3.degree. (0.5), 0.62, 28.5; myristate, 14, 111-12.degree., -40.8.degree. .fwdarw. -31.2.degree. (0.5), 0.63, 29.4;palmitate 19, 115-17.degree., -35.9.degree. .fwdarw. -27.0.degree. (0.5), 0.63, 67.4.

IT **20750-04-3 20750-05-4 20750-06-5**
20750-07-6 20750-08-7 20750-09-8
20814-82-8 20970-99-4
RL: PRP (Properties)
(surface activity of)

RN 20750-04-3 CAPLUS
CN Fructopyranose, 1-decanoate, D- (8CI) (CA INDEX NAME)

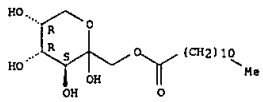
Absolute stereochemistry.



L7 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2002 ACS (Continued)

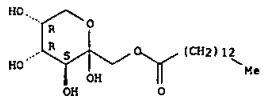
RN 20750-05-4 CAPLUS
CN D-Fructopyranose, 1-dodecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



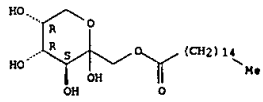
RN 20750-06-5 CAPLUS
CN Fructopyranose, 1-myristate, D- (8CI) (CA INDEX NAME)

Absolute stereochemistry.



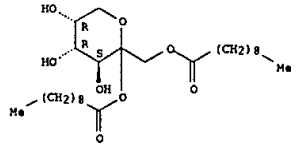
RN 20750-07-6 CAPLUS
CN Fructopyranose, 1-palmitate, D- (8CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 20750-08-7 CAPLUS
CN Fructopyranose, 1,2-didecanoate, D- (8CI) (CA INDEX NAME)

Absolute stereochemistry.



09/699,002

=> d ibib ab fqhit 1-38

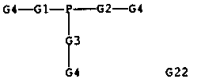
L11 ANSWER 1 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 135:312738 MARPAT
TITLE: Ternary ligand complexes containing highly functionalized triphenylphosphines useful as radiopharmaceuticals
INVENTOR(S): Liu, Shuang
PATENT ASSIGNEE(S): Dupont Pharmaceuticals Company, USA
SOURCE: PCT Int. Appl., 210 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001077122	A1	20011018	WO 2001-US11387	20010406
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002012631	A1	20020131	US 2001-826449	20010405

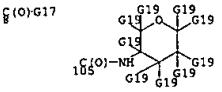
PRIORITY APPLN. INFO.: US 2000-195235 20000407
AB This invention relates to novel highly functionalized triphenylphosphine ligands as ancillary ligands in radiopharmaceuticals. Also, this invention provides radiopharmaceuticals comprised of highly functionalized phosphine ligated 99mTc labeled hydrazinonicotinamide (HYNIC)-conjugated biomols. that selectively localize at sites of disease and thus allow an image to be obtained of the loci using gamma scintigraphy. The chelator-modified biomols. include IIb/IIIa antagonists, tuftsin, receptor antagonists, chemotactic peptides, vitronectin receptor antagonists, tyrosine kinase inhibitors, and aminocarboxylates. The invention also provides methods of use of the radiopharmaceuticals as imaging agents for the diagnosis of cardiovascular disorders such as thromboembolic disease or atherosclerosis, infectious disease and cancer. The invention further provides kits for the prepn. of the radiopharmaceuticals. The highly functionalized phosphines contain hydroxy or polyhydroxy functionalities which are of interest because they can form neutral 99mTc complexes. The highly functionalized phosphines can contain carboxy or polycarboxy functionalities which are used to increase hydrophilicity and to improve blood clearance and renal excretion of the 99mTc-labeled biomol. The highly functionalized phosphines can also contain metabolizable ester or polyester functionalities and form neutral 99mTc complexes (if there is no charge on the biomol.), which can cross the cell membrane and potentially bind intracellular receptors. In an example, the functionalized ligand P(C6H4(CONHCH2CH2OH)-p)3 (L3) was prepd. The ligand was reacted with [99mTc]pertechnetate in the presence of HYNIC-Ln-Q, a HYNIC-conjugated biomol., and with tricine, to give [99mTc(HYNIC-Ln-Q)(tricine)(L3)] in >70% yield.

MSTR 1

L11 ANSWER 1 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)



G4 = 8 / 105



G17 = alkyl<(1-10)> (SO)
G19 = OH / 155

G20 = OH
MPL: claim 1
NTE: and radiopharmaceuticals with G22 metals or pharmaceutically acceptable salt forms
NTE: additional oxo substitution also claimed
NTE: substitution is restricted

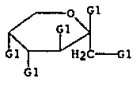
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 134:227367 MARPAT
TITLE: High viscosity liquid controlled delivery system and medical or surgical device
INVENTOR(S): Gibson, John W.; Sullivan, Stacey A.; Middleton, John G.; Tipton, Arthur J.
PATENT ASSIGNEE(S): Southern Biosystems, Inc., USA
SOURCE: PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001015734	A2	20010308	WO 2000-US23270	20000824
WO 2001015734	A3	20010913		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 1999-385107 19990827
AB The present invention relates to novel nonpolymeric compds. and compns. that form liq., high viscosity materials suitable for the delivery of biol. active substances in a controlled fashion, and for use as medical or surgical devices. The materials can optionally be dild. with a solvent to form a material of lower viscosity, rendering the material easy to administer. This solvent may be water insol. or water sol., where the water sol. solvent rapidly diffuses or migrates away from the material in vivo, leaving a higher viscosity liq. material. A compd. 1,6-hexanediol lactate 5-hydroxycaproic acid was prepd. and dissolved in N-methylpyrrolidone at a wt. ratio of 70:30, and then 10 % bupivacaine base was added to this mixt. and dissolved. Drops weighing approx. 100 mg were pptd. into 40 mL buffer. Samples of buffer were removed at specified times and replaced with fresh buffer. Buffer samples were analyzed by UV-vis spectrophotometry at 265 nm to det. the concn. of bupivacaine in each buffer sample.

MSTR 4



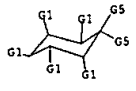
G1 = OH / alkanoyloxy (SO OH)
MPL: claim 31

L11 ANSWER 3 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 134:178271 MARPAT
TITLE: Process for preparing substituted cyclohexanoic acids via .alpha.-chloroepoxy esters
INVENTOR(S): Diederich, Ann M.; Novak, Vance J.
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

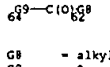
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001010822	A1	20010215	WO 2000-US21394	20000804
W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CZ, DZ, EE, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, TZ, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 1999-147576 19990806
OTHER SOURCE(S): CASREACT 134:178271
AB A process for prepg. substituted cyclohexanoic acids I is proposed, where Ra is a carbon-contg. group optionally linked by oxygen, sulfur or nitrogen to the cyclohexyl ring and n is 1-10; and R and R' are independently but not simultaneously hydrogen or C(O)E where E is OR14 or SR14, where R14 is hydrogen or alkyl of 1-6 carbon atoms; which process comprises treating an epoxide II with DMSO and an alkali metal salt, wherein E is OR14 or SR14, where R14 is hydrogen or alkyl of 1-6 carbon atoms; Ra is the same as defined for I; and Y is Br, Cl, F or I. Thus, .alpha.-chloroepoxy ester III was prepd. via reaction of 4-cyano-4-(3-cyclopentyloxy-4-methoxyphenyl)cyclohexan-1-one with Me dichloroacetate and tert-butoxide in THF, subsequently sapond. and the corresponding chloroepoxy acid treated with DMSO, NaCl and water, and heated to 150 .degree.C for 3.5 h to yield IV (59%).

MSTR 1

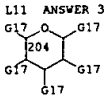


G7 = 64-61 62-52



G8 = alkylene<(1-)> (SO (1-) G11)
G9 = O
G12 = alkylene<(1-)> (SO (1-) G11)
G13 = 204

L11 ANSWER 3 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)

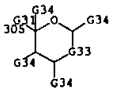


G17 = OH
MPL: claim 1
NTE: substitution is restricted

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)

G24 = O
G25 = 305



G27 = O
G33 = (0-1) 308

G37 = (1-2) CH2
DER: or pharmaceutically acceptable salts
MPL: claim 1
NTE: substitution is restricted
STE: single stereoisomer or mixture

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

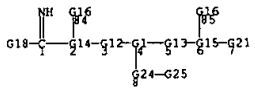
L11 ANSWER 4 OF 38 MARPAT COPYRIGHT 2002 ACS

ACCESSION NUMBER: 133:17462 MARPAT
TITLE: Preparation of hydroxyalkylheteroaromatics as factor Xa inhibitors
INVENTOR(S): Phillips, Gary B.
PATENT ASSIGNEE(S): Berlex Laboratories, Inc., USA
SOURCE: PCT Int. Appl., 71 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

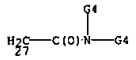
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000031068	A1	20000602	WO 1999-IB2067	19991117
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6262088	B1	20010717	US 1998-196921	19981119
EP 1131315	A1	20010912	EP 1999-959637	19991117
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 2001023291	A1	20010920	US 2001-849133	20010504
US 2001023292	A1	20010920	US 2001-849146	20010504
US 2001025108	A1	20010927	US 2001-849319	20010504
US 2001044536	A1	20011122	US 2001-849121	20010504
US 2001044537	A1	20011122	US 2001-849335	20010504
PRIORITY APPLN. INFO.:			US 1998-196921	19981119
			WO 1999-IB2067	19991117

AB Title compd. I [R = 1-methylimidazolin-2-yl (sic)] was prepd. Data for biol. activity of title compds. were given.

MSTR 1



G6 = 27



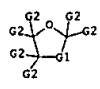
L11 ANSWER 5 OF 38 MARPAT COPYRIGHT 2002 ACS

ACCESSION NUMBER: 132:12479 MARPAT
TITLE: combinatorial libraries and solid phase synthesis of glycosides and glycopeptides
INVENTOR(S): Sofia, Michael J.; Jain, Rakesh K.; Vaughan, Andrew; Gange, David M.; Ghosh, Manuka
PATENT ASSIGNEE(S): Incara Pharmaceuticals Corp., USA
SOURCE: PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9961583	A2	19991202	WO 1999-US12032	19990528
WO 9961583	A3	20000406		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			US 1998-87072	19980528

AB A compd. of structure I wherein X is O or S; Z is O or NH; Y is COOH, COOR2 , CH2OR3, CH3, or CHsY2(3-s) where Y2 is F, Cl, Br or I, and s is 0, 1, or 2 or Y and one of ZR4 and OR5 are linked to form a 6-membered cyclic acetal; Q = (CH2)n; p is 0 or 1; m is 0 or 1; n is 1 or 2. A library of compds. of structure II wherein X is O or S; Q = (CH2)n; A1 is a residue of an .alpha.-amino acid attached through a terminal amino, a peptide residue comprising residues of from 2 to 10 .alpha.-amino acids and attached through a terminal amino, R1 O, R1S, R1, R1NH or R1N-alkyl; A2 is a residue of an .alpha.-amino acid attached through a terminal carboxyl, a peptide residue comprising residues of from 2 to 10 .alpha.-amino acids and attached through a terminal carboxyl, R2SO2, R2NHCO, R2OP(O)(OR6), R2P(O)(OR6) or R2, or A2, A3 and N combine to form a nitrogen heterocycle; A3 is hydrogen when A3 is not combined with A2 and N; A4 is OR4, NHR4, CH2OR4 or CH3; A5 is O, NH or N-alkyl; p, q and r are independently 0 or 1; Y1 and Y2 are independently O or CH2; each of L1 and L2 is independently a difunctional alkyl, aryl, aralkyl, alkanoyl, aroyl or aralkanoyl group; L3 is a single bond, CH2, carbonyl, OP(O)(OR7), NHP(O)(OR7), P(O)(OR7). Thus, solid phase prepn. of Me 4-azido-4-deoxy-3O-benzoyl-2'-O-carboxymethyl-.alpha.-D-fucopyranoside using peptide-bound resins is reported.

MSTR 1



G1 = (1-2) CH2 (SO G2)
G2 = 20

L11 ANSWER 5 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)

H_2C(20)—G9

G3 = O
G4 = 33

C(33)-G12

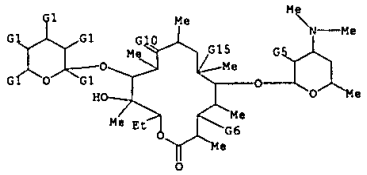
G9 = OH
G12 = Ak<EC (1-20) C, BD (0-) D (0-) T>
(SO (1-) aryl<EC (6-20) C, RC (1-4)> (SO))
MPL: claim 1
NTE: substitution is restricted
NTE: additional substitution and ring formation also claimed
NTE: also incorporates claim 55

L11 ANSWER 6 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 130:338345 MARPAT
TITLE: Preparation of 11-substituted erythromycin A derivatives
INVENTOR(S): Asaga, Toshifumi; Kashimura, Masato; Morimoto, Shigeo; Kobori, Takeo; Sugimoto, Kikuo; Aida, Kenichi
PATENT ASSIGNEE(S): Taisho Pharmaceutical Co., Ltd., Japan; Sagami Chemical Research Center
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11116590	A2	19990427	JP 1997-280988	19971015

AB The derivs. I [X = amino, alkoxy, lower alkyl, arylthio, acyloxy, acyloxymethyl, acylamino, aminomethyl, alkoxycarbonyl, azido, OH, CH2OH; Y = H, (un)substituted tetrahydropyranyl; n = 0-4; R1 = acyloxyimino, :NOH, O; R2 = H, Me; R3 = H, acyl] or their pharmaceutically acceptable salts are prepd. Introduction of tetrahydropyranyl group to 11 position of erythromycin A enhances the bactericidal activity against erythromycin A-susceptible strains. 3-O-.alpha.-cladinosyl-11-O-.alpha.-cladinosyl-5-O-desosaminyl-6-O-methylerythronolide A (prepd. from 4-O-acetyl-1-phenylsulfinylcladinose and 5-O-(2'-O-acetyl)desosaminylerythronolide A 9-acetoxime with 3 steps) inhibited growth of Staphylococcus aureus 209P-JC at MIC 0.39 .mu.g/mL.

MSTR 1



G1 = alkoxy / 59

H_2C(59)—G4

G4 = acyloxy
G11 = acyloxy
DER: or pharmaceutically acceptable salts
MPL: claim 1

L11 ANSWER 6 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)

L11 ANSWER 7 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 130:52679 MARPAT
TITLE: Preparation and combinatorial libraries of uronic acids as antibacterial agents
INVENTOR(S): Chan, Tin Yau; Sofia, Michael J.
PATENT ASSIGNEE(S): Intercardia, Inc., USA
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

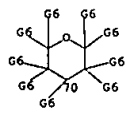
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9853813	A1	19981203	WO 1998-US10867	19980528
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9877000	A1	19981230	AU 1998-77000	19980528
EP 998280	A1	20000510	EP 1998-924946	19980528
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002502393	T2	20020122	JP 1999-500897	19980528
PRIORITY APPLN. INFO.:			US 1997-47946	19970529
			WO 1998-US10867	19980528

AB Prepn. of library of sugars with a scaffold design that incorporates a carboxylic acid moiety, a free or protected hydroxy group and an amino or protected amino group. Uronic acids I, wherein NP represents amino, protected amino, or amino bound to a solid support; p is 0, 1; X is COOH, COOR1, Me, CH2OR2; Y is CHOR3, NHR4, OR4; Z is O, NH, S; R1 is alkyl, aryl, aralkyl; R2-R6 are independently H, alkyl, aryl, aralkyl, alkanoyl, aralkanoyl, aroyl, hydroxyl protecting group; m is 0, 1; n is 1, 2 were prepd. as bactericides. Thus, uronic acid II was prepd. and tested as bactericide.

MSTR 1

G1—G5

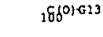
G1 = OH
G5 = 70



G6 = 90 / OH

L11 ANSWER 7 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)

G10 = OH
G11 = 100



G13 = Ak<(1-20)> (SO)
MPL: claim 1
NTE: substitution is restricted

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 8 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)
G10 = 48

G11 = OH
DER: and salts, analogues, and complexes
MPL: claim 3

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

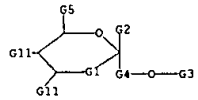
L11 ANSWER 8 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 130:38635 MARPAT
TITLE: Preparation and analgesic properties of glycoconjugates of opiated substances
INVENTOR(S): Valencia, Gregorio; Rodriguez, Raquel Emilia
PATENT ASSIGNEE(S): Rolabo Sl, Spain; Cockbain Julian
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9854196	A1	19981203	WO 1998-GB1578	19980529
W: CA, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 984974	A1	20000315	EP 1998-924479	19980529
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				

PRIORITY APPLN. INFO.: GB 1997-11118 19970529
WO 1998-GB1578 19980529

AB Title compds., being a sugar deriv. of a biol. active opiate comprising at least one sugar residue coupled with at least one opiate residue through an .alpha.-glycosidic bond, [I; R = CH3, cyclopropylmethyl, cyclobutylmethyl, allyl; R1 = H, OH, OAc, OMe, CH2; R2 = H, OH; X = glycosidic bond, linker group; Y = mono, di, or trisaccharide sugar; variable bond is either single or double], salts, analogs, and complexes thereof are prepd. as analgesics.

MSTR 1



G1 = (0-1) 18

G2 = 20

G7 = alkyl<(1-18)>
G9 = OH

L11 ANSWER 9 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 129:343328 MARPAT
TITLE: Preparation of new benzyl- and (phenylethyl)amine derivatives as medicaments
INVENTOR(S): Anderskewitz, Ralf; Schromm, Kurt; Renth, Ernst-Otto; Birke, Franz; Jennewein, Hans Michael; Meade, Christopher John Montague
PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9849131	A1	19981105	WO 1998-EP2530	19980429
W: AU, BG, BR, BY, CA, CN, CZ, EE, HU, ID, IL, JP, KR, KZ, LT, LV, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, UZ, VN, YU				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CN 1204315	A	19990106	CN 1996-198959	19961211
DE 19718334	A1	19981105	DE 1997-19718334	19970430
ZA 9803523	A	19981030	ZA 1998-3523	19980428
AU 9877600	A1	19981124	AU 1998-77600	19980429
EP 980351	A1	20000223	EP 1998-925500	19980429
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001524966	T2	20011204	JP 1998-546609	19980429
US 6288277	B1	20010911	US 2000-423160	20000403

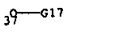
PRIORITY APPLN. INFO.: DE 1997-19718334 19970430
WO 1998-EP2530 19980429

AB The title compds. [I; X, Y = O, NH, NMe2, CH2; R1, R2 = H, OH, F, Cl, Br, iodo, C1-6 alkyl, O(C1-6 alkyl), CF3; R3 = H, NH2, NHCOR5; R4 = H, CH2NH2, CH2NHCOR5; R5 = H, C1-6 alkyl, (un)substituted Ph, O(C1-6 alkyl)]; A = CR6R7, CO, SOx, O; R6 = H, C1-4 alkyl, CF3, etc.; R7 = H, C1-4 alkyl, etc.; B = C1-6 alkyl, Ph, naphthyl, thienyl, pyridyl, etc.; x = 0-2; with provisos] and their optical isomers, mixts. of enantiomers, racemates and salts with pharmaceutically acceptable acids, LTB4 antagonists useful for the therapy of arthritis, asthma, chronical lung diseases, , psoriasis, cystic fibrosis, Alzheimer's disease, etc., were prepd. For example, dissolving 1.15 g 4-(H2NCH2CH2)C6H4OH in 15 mL MeOH, adding 1.5 g NaOMe (30% soln. in MeOH), evapg. the mixt., adding the residue to a soln. of 2.93 g 3-[4-(2-phenylpropyl)phenoxymethyl]benzyl chloride in 25 mL MeCN, stirring the whole for 3 h at 60-70.degree., evapg. the solvents and treating the residue with alc. HCl gave 1 g II-HCl (m. 145.degree.). Approx. 34 I were prepd. and Ki values for approx. 32 I varying between 0.5 and 263 nM were given.

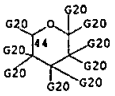
MSTR 1

G11 = alkylene<(1-)> (SO (1-) G24)
G13 = 37

L11 ANSWER 9 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)



G17 = 44



G20 = OH / CH2OH
G24 = CO2H / alkoxycarbonyl<(1-6)> (SO (1-) G30)
DER: and acid addition salts
MPL: claim 1
NTE: substitution is restricted
NTE: also incorporates claim 4, sturcture IV
STE: and optical isomers, enantiomeric mixtures, or racemates

L11 ANSWER 10 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)
G9 = 24

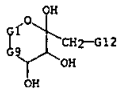
G12 = OH
DER: and pharmaceutically acceptable salts
MPL: claim 1

L11 ANSWER 10 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 129:230947 MARPAT
TITLE: Chemo-enzymic method for the production of oligosaccharides and their derivatives
INVENTOR(S): Fessner, Wolf-Dieter; Petersen, Michael; Papadopoulos, Michael Arthur; Osswald, Gerd
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9840390	A2	19980917	WO 1998-EP1096	19980226
WO 9840390	A3	19990114		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
DE 19709787	A1	19980917	DE 1997-19709787	19970311
AU 9868242	A1	19980929	AU 1998-68242	19980226
PRIORITY APPLN. INFO.:			DE 1997-19709787	19970311
			WO 1998-EP1096	19980226

AB The invention relates to novel oligosaccharides and the derivs. thereof in addn. to a general method for stereo divergent prodn. of oligosaccharides from easily accessible simple glycosides, wherein a further saccharide element is stereo selectably created from the aglycon constituent thereof by means of chain elongation reactions. This is achieved by (optional) chem. addn. of an aldehyde equiv. to a C=X-double bond in the aglycon, followed by diastereo-selective enzymic addn. of a nucleophile aldol donor to the glycosylated aldehyde in the presence of various stereo-specific aldolases. The resulting oligosaccharides, which carry an addnl. ketose unit on the reducing end when DHAP-dependent aldolases are used, and their corresponding phosphate esters and suitable derivs. thereof are useful as constituents of precursors for pharmaceutically active substances.

MSTR 1



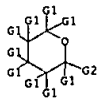
G1 = CH2
G6 = alkylcarbonyl<(-7)>
G8 = OH

L11 ANSWER 11 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 128:244285 MARPAT
TITLE: Preparation of new benzamidine-pyranosides as leukotriene B4 receptor antagonists
INVENTOR(S): Anderskewitz, Ralf; Schromm, Kurt; Renth, Ernst-Otto; Birke, Franz; Jennewein, Hans Michael; Meade, Christopher John Montague; Ding, Andreas
PATENT ASSIGNEE(S): Boehringer Ingelheim International G.m.b.H., Germany; Boehringer Ingelheim Pharma K.-G.; Anderskewitz, Ralf; Schromm, Kurt; Renth, Ernst-Otto; Birke, Franz; Jennewein, Hans Michael; Meade, Christopher John Montague; Ding, Andreas
SOURCE: PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9811119	A1	19980319	WO 1997-EP4948	19970910
W: AU, BG, BR, BY, CA, CN, CZ, EE, HU, IL, JP, KR, KZ, LT, LV, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19637123	A1	19980319	DE 1996-19637123	19960912
AU 9746225	A1	19980402	AU 1997-46225	19970910
EP 931087	A1	19990728	EP 1997-944867	19970910
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001500146	T2	20010109	JP 1998-513252	19970910
US 6197753	B1	20010306	US 1999-264649	19990308
PRIORITY APPLN. INFO.:			DE 1996-19637123	19960912
			WO 1997-EP4948	19970910

AB The present invention relates to novel pyranoside derivs., which are potent LTB4 receptor antagonists, process for the manuf. thereof and their use as pharmaceuticals (no data). Thus (I, R = H) was reacted with Me acetobromo-.alpha.-D-glucuronopyranoside to give I, R = (II).

MSTR 2



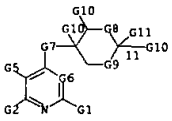
G1 = OH / CH2OH / alkylcarbonyloxy
G2 = OH
MPL: claim 4

L11 ANSWER 12 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 127:331498 MARPAT
TITLE: Substituted pyridines and pyrimidines as pest control agents
INVENTOR(S): Braun, Ralf; Schaper, Wolfgang; Knauf, Werner; Sanft, Ulrich; Kern, Manfred; Bonin, Werner
PATENT ASSIGNEE(S): Hoechst Schering Agrevo Gmbh, Germany
SOURCE: Ger. Offen., 30 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19613329	A1	19971009	DE 1996-19613329	19960403
CA 2250836	AA	19971016	CA 1997-2250836	19970324
WO 9737991	A1	19971016	WO 1997-EP1483	19970324
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, UZ, VN, YU				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9721597	A1	19971029	AU 1997-21597	19970324
EP 892798	A1	19990127	EP 1997-914297	19970324
R: DE, ES, FR, GB, IT				
JP 2000508636	T2	20000711	JP 1997-535788	19970324
US 6207668	B1	20010327	US 1997-829841	19970401
ZA 9702794	A	19971031	ZA 1997-2794	19970402
PRIORITY APPLN. INFO.:			DE 1996-19613329	19960403
			WO 1997-EP1483	19970324

AB Title compds. I [A = CH, N; X = O, S, SO, SO2; R = substituted satd. 5- or 6-membered O, S, or N heterocycle; R1 = H, ha logen, alkyl, haloalkyl, cycloalkyl; R2, R3 = H, (un)substituted aliph., alkoxy, alkylthio, acyl, cycloalkyl, trialkylsilyl, cyano, thiocyano, esterified CO2H; R2R3 = atoms required to complete a 5- or 6-membered ring] were prepd. for use as fungicides, insecticides, acaricides and ovicides. Thus, the pyrimidine II was prepd. by treating 4,5-dichloro-6-ethylpyrimidine with th amine which was prepd. from benzaldehyde and allyl bromide in 6 steps. II had insecticidal activity against Musca domestica at 300 ppm.

MSTR 1



G2 = alkylcarbonyl<(1-3)> (SO (1-) G12)

L11 ANSWER 12 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)
G7 = O
G8 = 25

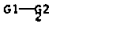
G9 = O
G10 = alkoxy<(1-4)> (SO (1-) G12)
G11 = CH2OMe
DER: and salts
MPL: claim 1
NTE: substitution is restricted
NTE: additional ring formation also specified

L11 ANSWER 13 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 127:136035 MARPAT
TITLE: Glycoconjugates of opioids
INVENTOR(S): Cowie, Diana; Valencia Paera, Gregori
PATENT ASSIGNEE(S): Farmhispania, S.A., Spain; Cowie, Diana; Valencia Parera, Gregori
SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Spanish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

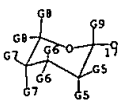
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9721416	A2	19970619	WO 1996-ES214	19961115
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2211596	AA	19970619	CA 1996-2211596	19961115
EP 816375	A1	19980107	EP 1996-938222	19961115
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 10513485	T2	19981222	JP 1996-521758	19961115
PRIORITY APPLN. INFO.:			ES 1995-2346	19951129
			WO 1996-ES214	19961115

AB Glycoconjugates of biol. active opioids were prepd. which have at least one residue of carbohydrate linked to the opioid via an O- or C-glycoside bond. Thus, 6-morphinyl-.beta.-D-glucopyranoside acetate was prepd. by reaction of tetra-acetyl-.alpha.-D-glucopyranosyl bromide with 3-O-acetylmorphine, followed by sapon. with MeONa-MeOH.

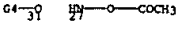
MSTR 1



G1 = 17



G5 = 31 / 27



G6 = 33

L11 ANSWER 13 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)
G7 = 35

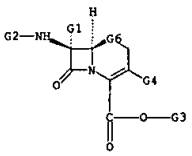
G9 = CH2OH
MPL: claim 4
NTE: also incorporates claims 23, 24, 58, 66, and structures VIII a-i, IX a-e, X a-e, XI a-e

L11 ANSWER 14 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 125:114393 MARPAT
TITLE: Process for the preparation of cephalosporins and analogs
INVENTOR(S): Burton, George; Naylor, Antoinette
PATENT ASSIGNEE(S): Pfizer Inc., USA
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9617847	A1	19960613	WO 1995-GB2783	19951129
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRIORITY APPLN. INFO.:			GB 1994-24847	19941209

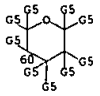
OTHER SOURCE(S): CASREACT 125:114393
AB Cephalosporins I [X = S, SO, SO2, O, CH2; R1 = H, OMe, NHCHO; R2 = acyl; R3 = in vivo hydrolizable ester group; R4 = (un)substituted tetrahydrofuryl, tetrahydropyranyl] are prepd. by reaction of the corresponding carboxylic acid with R3Y (Y = halide) in the presence of an aq. phase contg. a base and a phase transfer catalyst. Subsequent removal of protecting groups, conversion of groups X and R2 and salt formation may be carried out. Thus, 4-methoxybenzyl (6R,7R)-7-phenylacetamido-3-[(S)-2-tetrahydrofuryl]cephem-4-carboxylate was treated with Me3CCO2CH2I, followed by deacylation and reacylation to give pivaloyloxymethyl (6R,7R)-7-[2-(2-amino-4-thiazolyl)-2-(Z)-methoxyiminoacetamido]-3-[(S)-2-tetrahydrofuryl]cephem-4-carboxylate.

MSTR 1



G2 = acyl
G4 = 60

L11 ANSWER 14 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)



G5 = alkoxy<(1-6)> / alkyl<(1-6)> {SR alkoxy<(1-6)>}
MPL: claim 1

L11 ANSWER 15 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 124:343981 MARPAT
TITLE: Synthesis of glycopyranosides as antitumors
INVENTOR(S): Billington, David; Dorey, Gilbert; Leon, Pascale; Atassi, Ghanem; Pierre, Alain; Burbridge, Michael; Guilbaud, Nicolas
PATENT ASSIGNEE(S): Adir Et Compagnie, Fr.
SOURCE: Eur. Pat. Appl., 48 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 699679	A1	19960306	EP 1995-401971	19950830
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
FR 2723947	A1	19960301	FR 1994-10462	19940831
FR 2723947	B1	19960927		
FI 9504026	A	19960301	FI 1995-4026	19950828
CA 2157156	AA	19960301	CA 1995-2157156	19950829
AU 9530345	A1	19960314	AU 1995-30345	19950829
AU 689290	B2	19980326		
NO 9503400	A	19960301	NO 1995-3400	19950830
JP 08073484	A2	19960319	JP 1995-221904	19950830
CN 1127757	A	19960731	CN 1995-116910	19950830
US 5595976	A	19970121	US 1995-521189	19950830
ZA 9507322	A	19960409	ZA 1995-7322	19950831
PRIORITY APPLN. INFO.:			FR 1994-10462	19940831

AB Title glycopyranosides, e.g. I (R = alkyl; R1 = alkyl, alkoxy; R2,R3 = H, alkyl, alkoxy; R4 = H, alkyl; R5,R6 = H , OH, heterocycle, amide), were prepd. as antitumors. Thus, glycoside II was prepd. and tested for its antitumor and cytotoxic activities.

MSTR 1

G1 = 7

G2 = OH
G5 = OH
G6 = 30

L11 ANSWER 15 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)
G9 = 49

G10 = 51

G11 = alkoxycarbonyl<(1-6)>
G16 = OH
G18 = 79

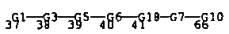
G19 = OH
DER: and pharmaceutically acceptable acid addition salts
MPL: claim 1
STE: and optical and geometric isomers

L11 ANSWER 16 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 124:9455 MARPAT
TITLE: Preparation of carbohydrate-containing peptides which bind to carbohydrate binding receptors.
INVENTOR(S): Meldal, Morten; Christensen, Mette Knak; Rozarth, Henriette Cordes
PATENT ASSIGNEE(S): Carlsberg A/S, Den.; Mouritsen and Elsner A/S
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9514036	A1	19950526	WO 1994-DK432	19941116
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ				
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9510632	A1	19950606	AU 1995-10632	19941116
PRIORITY APPLN. INFO.:			DK 1993-1292	19931116
			WO 1994-DK432	19941116

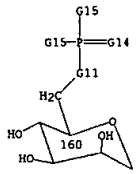
AB A1-A2(R1)-(A3)m-A4(R2)-(A5)n-A6(R3)-A7 [R1-R3 = (chem. modified) D- or L-Glc, -Man, -Gal, -Fuc, GlcNAc, GalNAc, Fru, Neu5Ac or oligosaccharides thereof; A1, A7 = H, OH, NH2, residues of D- or L-amino acids, peptides, glycopeptides, peptidomimetics, oligonucleotides; A2, A4, A6 = residues of D- or L-hydroxyamino acids, e.g. Ser, Thr, Tyr, or -carboxamidoamino acids, e.g. Asn, Gln; A3, A5 = residues of genetically encoded or non-encoded D- or L-amino acids, peptidomimetics, nucleotides; m, n = 1-15; any residue in the sequence A1-A7 may be covalently linked to form a cyclic deriv], were prepd. Thus, Ac-Thr(Q)-Lys(Y)-Thr(Q)-NH2 (Q = P-6-D-Man-.alpha.-(1,2)-D-Man, Y = anthranilate), prepd. by multiple column peptide synthesis on derivatized PEGA resin, showed a strong specific inhibition of the interaction between cation-independent mannose 6-phosphate receptor and solid phase bound mannose 6-phosphate.

MSTR 1

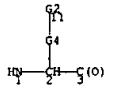


G2 = 160

L11 ANSWER 16 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)



G3 = 1-37 3-39



G4 = 26-2 27-11

G11 = O
DER: or pseudopeptide derivatives
MPL: claim 1
NTE: additional ring formation specified
STE: 247,258,270,281 - .alpha.-D-MANNO
STE: 2,46,68,75,81,88 - D,L

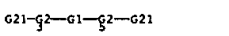
L11 ANSWER 17 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 124:9449 MARPAT
TITLE: Selective asymmetric hydrogenation of dehydroamino acid derivatives to .alpha.-amino acids using rhodium and iridium diphosphinite carbohydrate catalyst compositions
INVENTOR(S): Ayers, Timothy Allen; Rajanbabu, Thaliyil V.
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9518787	A1	19950713	WO 1995-US10	19950110
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5481006	A	19960102	US 1994-179859	19940111
CA 2178720	AA	19950713	CA 1995-2178720	19950110
EP 739333	A1	19961030	EP 1995-906739	19950110
EP 739333	B1	19981014		
R: DE, FR, GB, IT				
JP 09507789	T2	19970812	JP 1995-518536	19950110
US 5510507	A	19960423	US 1995-427327	19950424
PRIORITY APPLN. INFO.:			US 1994-179859	19940111
			WO 1995-US10	19950110

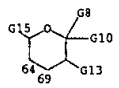
OTHER SOURCE(S): CASREACT 124:9449

AB A process and catalyst compn. are provided for the highly efficient enantioselective hydrogenation of dehydroamino acid derivs. ZZ1C:C(CO2Z2)NHZ3 (Z - Z3 = H, C1-40 carboalkoxy, arom. or nonarom. hydrocarbyl, or arom. or nonarom. heterocyclyl each optionally substituted with .gtoreq. halo, alkoxy, carboalkoxy, NO2, haloalkyl, OH, NH2, keto, or S-contg. group) with a source of H to the corresponding chiral .alpha.-amino acids ZZ1CHCH(CO2Z2)NHZ3 (Z - Z3 = same as above) in the presence of a catalyst compn. The catalyst compn. comprises rhodium or iridium and a diphosphinite carbohydrate ligand (R1)2-P-X-R2-X-P(R1)2 [R2 = C4-40 dideoxycarbohydrate; X = O, NR3; wherein R3 = H, C1-20 alkyl or aryl; R1 = (un)substituted arom. hydrocarbyl], wherein the phosphorous atoms are attached to arom. groups substituted with electron-donating substituents. Also provided is a means to selectively produce .alpha.-amino acids in either the L or the D form, based upon use of a sugar in the ligand with phosphinites attached in an abs. Right-Left or Left-Right configuration, resp. Thus, a 150 mL Fisher-Porter tube was charged with 50 mg PhCH:C(CO2H)NHAc, 1 mg a Rh-glucopyranoside diphosphinite deriv. (I; R1 = 3,5-dimethylphenyl) complex, i.e. I.Rh(COD)SbF6 (COD = cyclooctadiene), and 1 mL THF. The tube was sealed and charged with H (40 psi) for 3 h to give (S)-PhCH2CH(CO2H)NHAc of 99% e.e. Similarly, (R)-PhCH2CH(CO2H)NHAc of 97.0% e.e. was obtained by using a Rh-glucopyranoside diphosphinite deriv. (II; R1 = 3,5-dimethylphenyl) complex, i.e. II.Rh(COD)SbF6.

MSTR 2



L11 ANSWER 17 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)
G1 = 69-3 64-5



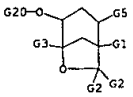
G2 = O
G8 = alkoxy
G10 = CH2OH
G13 = OH
G14 = acyl
MPL: claim 1

L11 ANSWER 18 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 123:220829 MARPAT
TITLE: Herbicidal bicyclic ethers.
INVENTOR(S): Rendina, Alan R.; Taylor, Wendy S.
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours and Co., USA
SOURCE: U.S., 49 pp. Cont.-in-part of U.S. Ser. No. 648,001, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5405830	A	19950411	US 1993-94130	19930729
WO 9213861	A1	19920820	WO 1992-US31	19920109
W: BR, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
BR 9205717	A	19940517	BR 1992-5717	19920109
JP 06505249	T2	19940616	JP 1992-505285	19920109
PRIORITY APPLN. INFO.:			US 1991-648001	19910130
			WO 1992-US31	19920109

AB The bicyclic ethers I(R1=alkyl;R2=H,alkyl,alkenyl, alkynyl;R3,R4=R2,methoxyalkyl,ethoxyalkyl;X=CH2Br,CH2CN,CH2CH:CH2,CH2SMe, etc.;Q=2-pyridylmethyl,2-BrC6H4CH2,etc.) are prepd. as herbicides. 2-Endo-4-endo-(.+-.)-[5-methyl-4-(penylmethoxy)]-2-(2-propenyl)-6-oxabicyclo[3.2.1]octane is an example.

MSTR 1



G5 = 86

G7 = 90

G8 = 17

L11 ANSWER 18 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)

G20 = 12

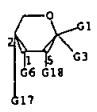
G24 = OMe
MPL: claim 1
NTE: additional ring formation allowed

L11 ANSWER 19 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 122:240340 MARPAT
TITLE: Preparation of psicofuranose and psicopyranose derivatives
INVENTOR(S): Terashima, Shiro; Katoh, Tadashi; Matsumoto, Miyoko
PATENT ASSIGNEE(S): Sagami Chemical Research Center, Japan
SOURCE: PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

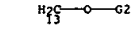
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9413685	A1	19940623	WO 1993-JP1796	19931210
W: US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 06172376	A2	19940621	JP 1992-352301	19921211
JP 3160105	B2	20010423		
EP 673947	A1	19950927	EP 1994-902104	19931210
EP 673947	B1	20000712		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AT 194622	E	20000715	AT 1994-902104	19931210
ES 2150479	T3	20001201	ES 1994-902104	19931210
PRIORITY APPLN. INFO.:			JP 1992-352301	19921211
			WO 1993-JP1796	19931210

OTHER SOURCE(S): CASREACT 122:240340
AB Title compds. I and II [R1,R2,R3,R4 = H, protecting group; X = (un)protected hydroxymethyl, carboxy, carbamoyl, etc.; R2R3 may also be [(di)alkyl]methylene; R5, R6, R7, R8 = H, protecting group), useful as key intermediates for hydantocidin (III), are prepd. E.g., 6-O-benzyl-1,2:3,4-di-O-isopropylidene-.beta.-D-psicofuranose in benzyl alc. was treated with CF3-SO3H, the resulting mixt. was stirred at room temp. for 2 h, and neutralized with concd. NH4OH to give I [R1 = benzyl, R2R3 = isopropylidene, R4 = benzyl, X = CH2OH].

MSTR 2



G1 = OH
G2 = COMe
G3 = 13



G6 = OH
G17 = OH
G18 = OH
MPL: claim 3

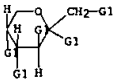
L11 ANSWER 19 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)

L11 ANSWER 20 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 122:56400 MARPAT
TITLE: Preparation of fatty acid monoesters of D-fructose for cosmetic use
INVENTOR(S): Philippe, Michael
PATENT ASSIGNEE(S): Oreal S. A., Fr.
SOURCE: Fr. Demande, 12 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

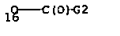
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2696467	A1	19940408	FR 1992-11770	19921005
FR 2696467	B1	19941104		

AB Title compds. were prepd. by esterification of D-fructose by RCO2CO2R1 [R = C7-21 alk(en)yl; R1 = alkyl]. Formulations comprising title compds. were given.

MSTR 5



G1 = (4) OH / (1) 16



G2 = alkyl<(7-21)>
MPL: claim 8

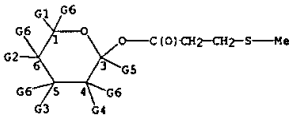
L11 ANSWER 21 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 122:31834 MARPAT
TITLE: Preparation of 1-O-3-methylthiopropionyl-pyranose and -furanose sugar derivatives as glycosyl donors and method for preparation of glycosides using the glycosyl donors
INVENTOR(S): Inazu, Toshuki; Nakamura, Kazumi
PATENT ASSIGNEE(S): Noguchi Kenkyusho, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06263785	A2	19940920	JP 1993-77582	19930311

OTHER SOURCE(S): CASREACT 122:31834
AB The title glycosyl donors (I and II; R = H, Me, CH2OH, OH, OCH2Ph, OAc, OMe, CH2OMe, CH2OCPh3, CH2OCH2Ph, CH2OAc, NHAc, Q, or Q1; or 2 R are bonded together to form OCMe2O or OCHPhO) are prepd. by reaction of the anomeric OH group of pyranose or furanose sugars with 3-methylthiopropionyl chloride in the presence of a base. The sugar derivs. I and II are reacted with an alc. selected from an aliph., arom., steroid alcs., glycerol derivs., sugar derivs., and amino acid derivs. in the presence of an activating agent selected from perchloric acid or trifluoromethanesulfonic acid salts. The latter salts are preferably trityl perchlorate and tin(II) trifluoromethanesulfonate. The above glycosidation is also carried out in the copresence of iodine with trityl perchlorate or lithium perchlorate with tin(II) trifluoromethanesulfonate. These glycosyl donors are stable and efficiently undergo glycosidation in good yields and are useful for prepg. glycosides of pharmaceutical and agrochem. interest such as antibiotics and anticancer agents and glycosides related to cell adhesion and differentiation. Thus, 1.013 g 2,3,4,6-tetra-O-benzyl-D-glucopyranose was dissolved in THF followed by adding 1.26 mL 1.68 M BuLi soln. at -40.degree. and after stirring at the same temp. for 30 min, 286 mg 3-methylthiopropionyl chloride in THF was added and the resulting mixt. was stirred at -40.degree. for 5 h to give 1-O-3-methylthiopropionyl-D-glucopyranose (III; R1 = 3-methylthiopropionyl; Bn = CH2Ph) in .alpha.-anomer 60% and .beta.-anomer 29% yield. The latter .beta.-anomer (50 mg) was dissolved in 1 mL Et2O followed adding 770 .mu.L 0.1 M iodine soln. in Et2O at room temp., stirring the resulting mixt. for 1 h, and evapg. the solvent. The residue was redissolved in 1 mL Et2O and 15 mg trityl perchlorate and 31 mg 3.beta.-cholestanol were added by using 1 mL Et2O at 0.degree. followed by stirring the resulting mixt. with raising the temp. to room temp. overnight and treating the reaction mixt. with 5% aq. Na2S2O3 to give, after purifn. by silica gel TLC, 87% glycoside III (R1 = 3.beta.-cholestanyl) in .alpha.:.beta. anomeric ratio of 8.4:1. In another example, glycosidation of the .alpha.-anomer III (R1 = 3-methylthiopropionyl) with Me 2,3,4-tri-O-benzyl-.alpha.-D-glucopyranoside in the presence of trityl perchlorate in Et2O gave 71% disaccharide III (R1 = Q2) in .alpha.:.beta. anomeric ratio of 8.7:1.

MSTR 1

L11 ANSWER 21 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)



G2 = OH
G3 = OH
G4 = OH
G5 = CH2OH
MPL: claim 1

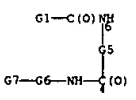
L11 ANSWER 22 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 121:292774 MARPAT
TITLE: Biologically active bistramides, process for their production, and their cytostatic applications in therapy, especially against tumors or parasites
INVENTOR(S): Biard, Jean Francois; Cortadellas, Dominique; Debitus, Cecile; Laurent, Dominique; Roussakis, Cristos; Verbist, Jean Francois
PATENT ASSIGNEE(S): Institut Francais de Recherche Scientifique pour Le Development Cooperation, Fr.
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9420503	A1	19940915	WO 1994-FR256	19940308
W: AU, BR, CA, JP, NZ, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2702478	A1	19940916	FR 1993-2662	19930308
FR 2702478	B1	19950505		
FR 2707644	A1	19950120	FR 1993-7925	19930629
FR 2707644	B1	19950929		
CA 2157760	AA	19940915	CA 1994-2157760	19940308
AU 9462108	A1	19940926	AU 1994-62108	19940308
AU 679501	B2	19970703		
EP 688323	A1	19951227	EP 1994-909165	19940308
R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, SE				
US 5798381	A	19980825	US 1996-513923	19960304

PRIORITY APPLN. INFO.: FR 1993-2662 19930308
FR 1993-7925 19930629
WO 1994-FR256 19940308

AB Bistramide derivs. (Markush included) (excluding A, B and C bistramides) with virtually no toxic effects are disclosed. The bistramides are useful esp. as drugs having a cytostatic effect, in particular as antitumor or anti-parasitic drugs. Isolation of bistramides D, K, and L from Lissoclinum bistratum, prepn. of bistramide D by redn. of bistramide A, characterization of the bistramides, are described. Activity of bistramides D, K, and L against a variety of tumor cell lines was detd. Anti-parasitic activity against Plasmodium vinckei petteri is also presented. An injection formulation of bistramide D is included.

MSTR 1



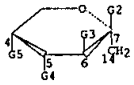
G3 = OH / 11

L11 ANSWER 22 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)

G4 = alkoxy<(1-4)>
G5 = Ak<(1-20)> (SR (1-) G3)
MPL: claim 1
NTE: substitution is restricted

L11 ANSWER 23 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)

G1 = 14



G2 = 33

G3 = OH
G4 = OH
G5 = OH
G6 = C(O)
G7 = alkyl (SO (1-) aryl)
MPL: claim 1

L11 ANSWER 23 OF 38 MARPAT COPYRIGHT 2002 ACS

ACCESSION NUMBER: 121:180109 MARPAT
TITLE: Preparation of cyclic chiral compounds
INVENTOR(S): Cadogan, John Ivan George; Hodgson, Philip Kenneth Gordon; Gosney, Ian; Banks, Malcolm Robert
PATENT ASSIGNEE(S): British Petroleum Co. PLC, UK
SOURCE: Brit. UK Pat. Appl., 31 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2261435	A1	19930519	GB 1992-23783	19921113
PRIORITY APPLN. INFO.:			GB 1991-24204	19911114

OTHER SOURCE(S): CASREACT 121:180109

AB Optically active cyclic compds. [I; R1, R2, R3, R4 = H, (CO)xR5 (in which x = 0 or 1 and R5 = alkyl, aryl, cycloalkyl, alkaryl or aralkyl), or R1 and R2 together and/or R3 and R4 together represent a divalent hydrocarbyl group; Q = O or S; Y = H, an alkali metal atom or alk. earth metal atom or a group of the general formula COA (in which A = halo, NHOH, or the residue of an amine, amino acid, alc. or thiol formed by removal of a hydrogen atom from a NH, OH or SH group, or A = alkyl, alkenyl, cycloalkenyl or alkoxy, each optionally substituted by an aryl, cycloalkyl, hydroxy, halo, alkoxy or acyl]; n = 0 when m = 1 and n = 1 when m = 0}, useful in asym. synthesis (serving as chiral auxiliary groups) and in the sepn. of optically active isomers, are prepd. by ring closure of compds. of the general formula {II; n, m, R1, R2, R3 and R4 are as previously defined; Z = N3 or a group of the general formula NHOSO2R6 (in which R6 = aryl)]. Thus, 28 g 2,3:4,5-di-O-isopropylidene-.beta.-D-fructopyranoside was reacted with COCl2 in pyridine, Et2O, and toluene at 0.degree. to room temp. to give 100% chloroformyl ester (III; R = COCl) which (34.7 g) was vigorously stirred with 14.1 g NaN3 in the presence of Bu4NBr in H2O and CH2Cl2 for 4 h to give 95% azidoformyl ester III (R = CON3). A soln. of the azidoformyl ester (33.6 g) in tetrachloroethane was heated under reflux for 4 h to give 51% 5-aza-3,10-dioxa[4.4.01.6]decan-4-one deriv. (IV; R5 = H) which (6 g) in THF was added to a prepd. soln. of Mg turnings and bromoethane in Et2O at 0.degree., stirred at 0.degree. for 15 min, and cooled to -78.degree. followed by adding a soln. of 2.6 g propionyl chloride in THF, warming to room temp., and stirring overnight to give 97% IV (R5 = propionyl). A soln. of the latter compd. (1.0 g) in THF was added to a prepd. mixt. of BuLi and (Me2CH)2NH in THF at -78.degree. with stirring and after stirring for 30 min, freshly distd. isobutyraldehyde (0.33 g) in THF was added followed by stirring for 30 min to give 95% IV (R5 = 2,4-dimethyl-3-hydroxypentanoyl) as a 9:1 mixt. of diastereoisomers which was treated with H2O2 in aq. THF at 0.degree. followed by addn. of LiOH.H2O, stirring the resulting mixt. for 1 h at 0.degree., and quenching the reaction with Na2SO3 soln. to give (2S,3R)-2,4-dimethyl-3-hydroxypentanoic acid.

MSTR 2

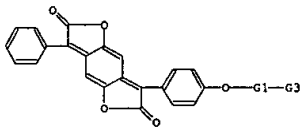
L11 ANSWER 24 OF 38 MARPAT COPYRIGHT 2002 ACS

ACCESSION NUMBER: 121:159334 MARPAT
TITLE: Compositions containing anthraquinone and benzodifurandione dyes and dyeing of hydrophobic materials using them.
INVENTOR(S): Fukui, Toshinori; Katsuda, Nobuyuki; Yabushita, Shinichi; Hashizume, Shuhei
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 603803	A1	19940629	EP 1993-120546	19931220
EP 603803	B1	19980506		
R: BE, CH, DE, ES, FR, GB, IT, LI				
JP 06184458	A2	19940705	JP 1992-342047	19921222
JP 3170917	B2	20010528		
US 5547478	A	19960820	US 1993-167019	19931216
PRIORITY APPLN. INFO.:			JP 1992-342047	19921222

AB The dye mixts. comprise .gtoreq.1 benzodifurandione I [Q = 5- or 6-membered heterocyclic residue; Z = CH2, C2-6 alkylene optionally substituted by OH, C1-4 alkoxy, or (C1-4 alkyl)carbonyloxy] and .gtoreq.1 anthraquinone II [R = (un)substituted C1-6 alkyl, (un)substituted Ph, (C1-4 alkoxy)phenylsulfonyl], and hydrophobic materials dyed with them give red products with excellent pH dependency and fastness to light and washing. Polyester fibers were thus dyed uniformly with a bath contg. 9 parts I (2Q = tetrahydrofurfuryl) and 1 part II (R = Ph).

MSTR 1



G1 = CH2
G3 = 59

G5 = OH / alkylcarbonyl<(1-4)>
G8 = O
MPL: claim 1

L11 ANSWER 24 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)

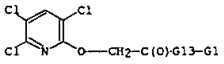
L11 ANSWER 25 OF 38 MARPAT COPYRIGHT 2002 ACS

ACCESSION NUMBER: 120:271065 MARPAT
TITLE: Preparation of herbicidal trichloropyridyloxyacetyl monosaccharides
INVENTOR(S): Clifford, David Philip
PATENT ASSIGNEE(S): Dow Chemical Co., UK
SOURCE: Brit. UK Pat. Appl., 27 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

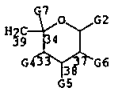
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2266305	A1	19931027	GB 1992-8088	19920413

AB Title compds. I (X = O, S; R = substituted monosaccharides) were prepd. as herbicides. Thus, I (X = O, R = 2,3,4,6-tetra-O-methyl-D-glucopyranosyl) (II) was prepd. from D-glucose via condensation of 2,3,4,6-tetra-O-methyl-D-glucopyranose with 3,5,6-trichloro-2-pyridylacetic acid. Compd. II reduces the phytotoxicity across a broad spectrum of trichloropyr-sensitive crops (e.g., barley, cotton, rape, soya, and sugar beet). Herbicidal activity of II against broad-leaved weeds is actually enhanced over the corresponding activity of free triclopyr I (X = O, R = H).

MSTR 1



G1 = 39



G4 = OMe
G5 = OMe
G6 = OMe
G7 = OMe
G13 = O
MPL: claim 1

L11 ANSWER 26 OF 38 MARPAT COPYRIGHT 2002 ACS

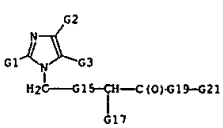
ACCESSION NUMBER: 120:107011 MARPAT
TITLE: Preparation of [(carbamoylmethyl)benzyl]imidazoles as angiotensin II antagonists
INVENTOR(S): Mueller, Ulrich; Mueller-Gliemann, Matthias; Dressel, Juergen; Fey, Peter; Hanko, Rudolf; Huebsch, Walter; Kraemer, Thomas; Niewoehner, Ulrich; Beuck, Martin; et al.
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Eur. Pat. Appl., 34 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 560162	A1	19930915	EP 1993-103217	19930301
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
DE 4208052	A1	19930916	DE 1992-4208052	19920313
NO 9300722	A	19930914	NO 1993-722	19930226
US 5420149	A	19950530	US 1993-25493	19930303
AU 9334027	A1	19930916	AU 1993-34027	19930305
CA 2091435	AA	19930914	CA 1993-2091435	19930310
ZA 9301772	A	19930929	ZA 1993-1772	19930312
HU 64039	A2	19931129	HU 1993-720	19930312
JP 06056795	A2	19940301	JP 1993-78700	19930312
CN 1076444	A	19930922	CN 1993-102259	19930313

PRIORITY APPLN. INFO.: DE 1992-4208052 19920313

AB Title compds. [I; A = alkyl, alkenyl, cycloalkyl; B = H, halo, perfluoroalkyl; D = CH2OR3, COR4, CONR5R6, etc.; R3 = H, alkyl; R4 = H, OH, alkoxy; R5, R6 = H, alkyl, etc.; E = H, halo, NO2, OH, CF3, OCF3, alkyl, alkoxy, alkoxycarbonyl, cyano, carboxy; L = (substituted) alkyl; R1 = H, alkyl; R2 = CMe2CH2OH, etc.], were prepd. Thus, 4-MeC6H4CH2CO2CMe3 (prepn. given) was alkylated with cyclopentyl bromide using KOCMe3 in DMF to give 97.5% tert-Bu 2-cyclopentyl-2-(4-methylphenyl)acetate. This was refluxed with N-bromosuccinimide and azobisisobutyronitrile in CCl4 to give 57% tert-Bu 2-(4-bromomethylphenyl)-2-cyclopentylacetate. Condensation of the latter with 2-butyl-5-formyl-4-chloroimidazole using NaH in DMF gave 66.7% benzylimidazole deriv., which was deesterified with CF3CO2H in CH2Cl2 (87.6%) followed by amidation with 3-amino-3-phenyl-1-propanol using Et3N/MeSO2Cl/DMAP in THF to give title compd. II. I reduce arterial blood pressure in rats at clin. relevant doses.

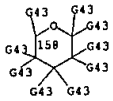
MSTR 1



G22 = CH2
G24 = alkyl<(2-8)> (SO (-3) G25)
G25 = OH / CO2H / CF3 / CN / CHO / alkylcarbonyl<(-7)> /

L11 ANSWER 26 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)

alkoxycarbonyl<(-8)> / 158



G43 = OH
DER: and salts
MPL: claim 1

L11 ANSWER 27 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 120:106998 MARPAT
TITLE: Pyrazolecarboxanilide agrochemical fungicides
INVENTOR(S): McLoughlin, Jim I.; Metz, Suzanne
PATENT ASSIGNEE(S): Monsanto Co., USA
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

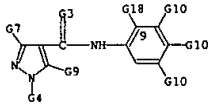
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9311117	A1	19930610	WO 1992-US10509	19921204
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KR, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
US 5223526	A	19930629	US 1992-967417	19921105
AU 9332407	A1	19930628	AU 1993-32407	19921204
AU 657598	B2	19950316		
ZA 9209441	A	19930825	ZA 1992-9441	19921204
EP 623113	A1	19941109	EP 1993-900895	19921204
EP 623113	B1	19970305		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 07501549	T2	19950216	JP 1992-510373	19921204
HU 67795	A2	19950428	HU 1994-1693	19921204
BR 9206869	A	19951128	BR 1992-6869	19921204
AT 149490	E	19970315	AT 1993-900895	19921204
CN 1078234	A	19931110	CN 1993-100017	19930102

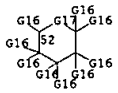
PRIORITY APPLN. INFO.: US 1991-802978 19911206
US 1992-877907 19920501
US 1992-967417 19921105
US 1992-936717 19920831
WO 1992-US10509 19921204

AB The title fungicides I [Q = C1-3 alkyl, C2-3 alkenyl, C2-3 alkynyl, (CH2)mCH:, (CH2)mX(CH2)m; X = O, S; m = 0-3; R1 = C3-12 cycloalkyl, C3-12 cycloalkenyl, C6-12 bicycloalkyl, C3-12 oxacycloalkyl, etc.; R2 = H, fluorinated Me, Me, Et, C2-6 alkenyl, C3-6 cycloalkyl, Ph, etc.; R3 = halomethyl, halomethoxy, Me, Et, halogen, CN, MeS, etc.; R4 = H, halogen, Me; R5-R7 = H, halogen, CN, C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C1-4 alkoxy, C1-4 alkylthio, etc.; n = 0, 1], which have a high level of succinate dehydrogenase inhibitory activity in ascomycetes, are prepd. and crop-testing data presented. Thus, 1-methyl-3-(trifluoromethyl)-1H-pyrazole-4-carboxylic acid chloride was condensed with 2-cyclohexylaniline, producing N-(2-cyclohexylphenyl)-1-methyl-3-(trifluoromethyl)-1H-pyrazole-4-carboxamide.

MSTR 1

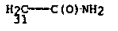
L11 ANSWER 27 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)





G1 = 52

G3 = O
G7 = 31



G14 = (1-3) CH2
G16 = alkoxy<(1-8)>
G17 = O
MPL: claim 1

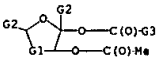
L11 ANSWER 28 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 119:141647 MARPAT
TITLE: Bleaching detergent compositions containing sugar derivatives as bleach precursors
INVENTOR(S): Smith, Richard George; Thornthwaite, David W.
PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever N. V.
SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 527039	A2	19930210	EP 1992-307138	19920805
EP 527039	A3	19950201		
R: CH, DE, ES, FR, GB, IE, IT, LI, NL, SE				
CA 2075112	AA	19930207	CA 1992-2075112	19920731
BR 9203043	A	19930330	BR 1992-3043	19920805
US 5360573	A	19941101	US 1992-926074	19920805
JP 05194997	A2	19930803	JP 1992-210427	19920806
ZA 9205901	A	19940207	ZA 1992-5901	19920806

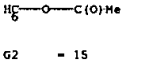
PRIORITY APPLN. INFO.: GB 1991-16939 19910806

AB Compns. contg. a source of H2O2 and a peroxy acid bleach precursor I or II (R1-2 = AcOCH2, H; R, R4 = C3-6 alkyl, alkenyl, alkynyl, Ph, C1-4 alkylphenyl, CH2OCOR3, CH2NHCOR3, quaternary ammonium group-contg. alkyl, etc.; R3 = R; n = 2-3) show good bleaching activity at low temp., e.g., on stained fabrics. Thus, 1-benzoyl-2,3,4,6-tetraacetylglucose was used with H2O2 for the bleaching of tea-stained fabrics.

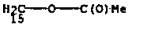
MSTR 1



G1 = (1-2) 6



G2 = 15



MPL: claim 1

L11 ANSWER 29 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 118:191726 MARPAT
TITLE: Preparation oxazole and thiazole derivatives as active oxygen inhibitors
INVENTOR(S): Chihiro, Masatoshi; Komatsu, Hajime; Tominaga, Michiaki; Yabuuchi, Youichi
PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 560 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9209586	A1	19920611	WO 1991-JP1659	19911129
W: AU, CA, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
CA 2074933	AA	19920531	CA 1991-2074933	19911129
AU 9189367	A1	19920625	AU 1991-89367	19911129
AU 656930	B2	19950223		
EP 513387	A1	19921119	EP 1991-920815	19911129
EP 513387	B1	20000301		
R: CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
JP 05051318	A2	19930302	JP 1991-342495	19911129
EP 934937	A1	19990811	EP 1999-107493	19911129
EP 934937	B1	20020227		
R: CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
ES 2144403	T3	20000616	ES 1991-920815	19911129
EP 1130017	A2	20010905	EP 2001-112988	19911129
EP 1130017	A3	20010919		
R: CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
US 5643932	A	19970701	US 1995-444728	19950519
US 5677319	A	19971014	US 1995-482657	19950607
US 6080764	A	20000627	US 1997-826343	19970325
JP 10101562	A2	19980421	JP 1997-233370	19970813
JP 3182556	B2	20010703		
US 37556	E	20020219	US 1999-245914	19990208

PRIORITY APPLN. INFO.: JP 1990-337727 19901130
EP 1991-920815 19911129
EP 1999-107493 19911129
JP 1991-342495 19911129
WO 1991-JP1659 19911129
US 1992-916082 19920729
US 1995-444728 19950519
US 1995-482657 19950607

AB The title compds. [I; R1 = (substituted) Ph; R2 = H, halo, alkyl, Ph alkoxycarbonyl, alkylamino, etc.; R3 = Q (wherein R = OH, CO2H, alkyl, alkenyl; m = 0-2); X = S, O], useful in treating thrombosis, arteriosclerosis, peptic ulcers, etc., are prepd. A suspension of 367 mg II and 430 mg 3,4-(MeO)2C6H3CSNH2 in EtOH was refluxed to give 160 mg thiazole salt III, which showed IC50 of 1 .mu.M against superoxide formation. I were also effective in treating arrhythmia, ischemic renal disorders, and myocardial necrosis.

MSTR 28

L11 ANSWER 29 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)

G4 = 352

G17 = 2-tetrahydropyranyl (SO (1-4) G18)
G18 = OH / loweralkyl (SR loweralkylcarbonyloxy)
DER: and salts
MPL: claim 2
NTE: substitution is restricted

L11 ANSWER 30 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 118:148719 MARPAT
TITLE: Migration-resistant plasticizers in biodegradable starch-thermoplastic polymer compositions
INVENTOR(S): Bastioli, Catia; Bellotti, Vittorio; Montino, Alessandro
PATENT ASSIGNEE(S): Novamont S.p.A., Italy
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9214782	A1	19920903	WO 1992-EP320	19920214
W: AU, BR, CA, CS, FI, HU, JP, KR, NO, PL, SU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
AU 9212226	A1	19920915	AU 1992-12226	19920214
AU 664168	B2	19951109		
EP 575349	A1	19931229	EP 1992-904038	19920214
EP 575349	B1	19980617		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE				
BR 9205651	A	19940607	BR 1992-5651	19920214
JP 06507924	T2	19940908	JP 1992-503985	19920214
HU 68412	A2	19950628	HU 1993-2378	19920214
HU 219571	B	20010528		
PL 170436	B1	19961231	PL 1992-300352	19920214
RU 2086580	C1	19970810	RU 1993-52398	19920214
AT 167503	E	19980715	AT 1992-904038	19920214
ES 2117044	T3	19980801	ES 1992-904038	19920214
CZ 284842	B6	19990317	CZ 1993-1712	19920214
ZA 9201196	A	19921125	ZA 1992-1196	19920219
CN 1066859	A	19921209	CN 1992-101580	19920219
CN 1043777	B	19990623		
IL 101017	A1	19960618	IL 1992-101017	19920219
US 5292782	A	19940308	US 1992-996880	19921228
NO 9302948	A	19930819	NO 1993-2948	19930819
PRIORITY APPLN. INFO.:			IT 1991-TO118	19910220
			WO 1992-EP320	19920214
			US 1992-839322	19920220

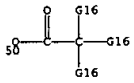
AB The title compns. are mixts. of starch, a thermoplastic polymer, and a plasticizer such as polyols, e.g., polyglycerol, PVA, etc., and their (thio)ether, (in)org. ester, acetal or amino derivs., and oxidn. products and specified derivs. Thus, plastic plates were prepd. by injection molding a melt-homogenized and granulated mixt. of Globe 3401 starch (11% H2O) 37, ethylene-vinyl alc. copolymer (42% ethylene, 99.5% hydrolyzed) 37, 80:20 ethylene-acrylic acid copolymer (melt flow 2 at 125.degree. and 0.325 kg) 3, Armid E 0.3, urea 5, polyglycerol 15, and H2O 2.7 parts. The plates showed neither bleeding nor loss of plasticizer after being exposed over 6 h to an artificial weathering cycle program, whereas similar plates made of the above compn. in which the polyglycerol was replaced by a glycerol (av. glycerol content 4) became oily.

MSTR 5

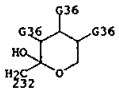
L11 ANSWER 30 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)

G10—G35

G10 = 50



G35 = 232



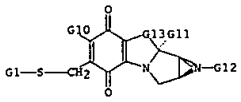
G36 = OH
DER: and salts
MPL: claim 8

L11 ANSWER 31 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 117:150800 MARPAT
TITLE: Mitomycin derivatives, methods for their preparation and their activity as neoplasm inhibitors and bactericides
INVENTOR(S): Arai, Hitoshi; Kono, Motomichi; Kasai, Masaji; Gomi, Katsushige; Ashizawa, Tadashi
PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 25 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 485904	A1	19920520	EP 1991-119074	19911108
EP 485904	B1	19970820		
R: DE, FR, GB, IT				
JP 05025176	A2	19930202	JP 1991-288676	19911105
US 5180825	A	19930119	US 1991-791188	19911113
PRIORITY APPLN. INFO.:			JP 1990-306663	19901113
OTHER SOURCE(S):		CASREACT 117:150800		

AB Mitomycin derivs. are claimed. Pharmaceuticals with antitumor and/or antibacterial activity contg. such mitomycin derivs. are claimed. Treatment of 1a-acetyl-7-demethoxy-6-demethyl-6,7-dihydro-7-ethylenedioxy-6-methylenemitomycin A with 2-mercaptopyridine gave the corresponding 6-[(2-pyridylthio)methyl]mitomycin A which was deprotected to give 6-demethyl-6-[(2-pyridylthio)methyl]mitomycin C (I). I inhibited the growth of HeLa S3 cells (IC50 = 1.8 .mu.M).

MSTR 15



G1 = 83

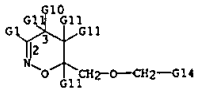
G8 = OH / alkylcarbonyloxy<(1-5)> / CH2OH
MPL: claim 1

L11 ANSWER 32 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 117:131232 MARPAT
TITLE: 6-alkoxy-3-(1,1-dimethylethyl)-5,6-dihydro-4H-oxazine derivatives, a method for their preparation and their use as herbicides
INVENTOR(S): Patel, Kanu Maganbhai; Stevenson, Thomas Martin
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: PCT Int. Appl., 112 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9209587	A1	19920611	WO 1991-US8243	19911113
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
AU 9190542	A1	19920625	AU 1991-90542	19911113
EP 559742	A1	19930915	EP 1992-900425	19911113
R: DE, ES, FR, GB, IT				

PRIORITY APPLN. INFO.: US 1990-618146 19901126
WO 1991-US8243 19911113
OTHER SOURCE(S): CASREACT 117:131232
AB Certain oxazine compds., e.g., 6-alkoxy- or 6-(benzyloxy)-3-(1,1-dimethylethyl)-5,6-dihydro-4H-oxazine derivs., and their use as herbicides are claimed. Cyclocondensation of 1-bromo-3,3-dimethyl-2-butanone oxime with methallyl alc. (CH2Cl2/Na2CO3) gave 3-(1,1-dimethylethyl)-5,6-dihydro-6-methyl-4H-oxazine-6-methanol. The latter was benzylated with 2-fluorobenzyl bromide to give 3-(1,1-dimethylethyl)-6-[[(2-fluorophenyl]methoxy]methyl]-5,6-dihydro-6-methyl-4H-oxazine (I). I had herbicidal activity against a broad spectrum of species tested.

MSTR 1B



G4 = 16

G6 = 21

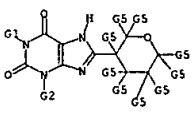
L11 ANSWER 32 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)
G14 = 2-tetrahydropyranyl (SO (1-2) G18)
G18 = OMe
MPL: claim 1

L11 ANSWER 33 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 117:26198 MARPAT
TITLE: Preparation of [(poly)cyclic (oxa)alkyl]xanthines and analogs as adenosine antagonists
INVENTOR(S): Kuefner-Muehl, Ulrike; Stransky, Werner; Walther, Gerhard; Weber, Karl Heinz; Ensinger, Helmut; Kuhn, Franz Josef; Schingnitz, Guenter; Lehr, Erich
PATENT ASSIGNEE(S): Boehringer Ingelheim K.-G., Germany
SOURCE: Ger. Offen., 28 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

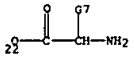
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4019892	A1	19920102	DE 1990-4019892	19900622
CA 2064742	AA	19911223	CA 1991-2064742	19910619
WO 9200297	A1	19920109	WO 1991-EP1131	19910619
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
EP 487673	A1	19920603	EP 1991-910772	19910619
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 05501265	T2	19930311	JP 1991-510343	19910619
US 5641784	A	19970624	US 1994-362105	19941222

PRIORITY APPLN. INFO.: DE 1990-4019892 19900622
WO 1991-EP1131 19910619
US 1992-834550 19920320
US 1993-168280 19931215
AB Title compds. [I; R1, R2 = alkyl, alkenyl, alkynyl; R3 = N-attached heterocyclyl, monosaccharide, cycloalkanone ketal; (poly)cyclic (oxa)alkyl, etc.] were prepd. as adenosine antagonists (no data). Thus, 7-carboxyspiro[cis-bicyclo[3.3.0]octane-3,2'-(1,3-dithiolane)] (prepn. given) was cyclocondensed with 5,6-diamino-1,3-dipropyluracil and the product hydrolyzed to give title compd. II.

MSTR 1D



G5 = OH / 22 / CH2OH



DER: and pharmacologically acceptable acid addition salts
MPL: claim 1
STE: and racemates, optically active compounds, diastereomers and mixtures

L11 ANSWER 33 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)

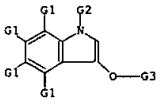
L11 ANSWER 34 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 117:3817 MARPAT
TITLE: Substance determination using hydrogen peroxide produced during enzymic indigo formation
INVENTOR(S): Tsuji, Akio; Maeda, Masako; Arakawa, Hidetoshi
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 476930	A1	19920325	EP 1991-308338	19910912
EP 476930	B1	19971112		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
CA 2051144	AA	19920313	CA 1991-2051144	19910911
JP 04356200	A2	19921209	JP 1991-232999	19910912
AT 160177	E	19971115	AT 1991-308338	19910912
ES 2110979	T3	19980301	ES 1991-308338	19910912

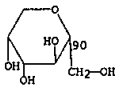
PRIORITY APPLN. INFO.: JP 1990-240018 19900912

AB A sensitive method for detn. of a substance comprises measuring the H2O2 producing during enzymic prodn. of indigo from an 3-O-indoxyl ester. An immunoassay for .alpha.-fetoprotein according to this method utilized anti-.alpha.-fetoprotein antibody-coated tubes and alk. phosphatase-anti-.alpha.-fetoprotein antibody conjugates. Chemiluminescence detection of the sample followed addn. of the indoxyl ester 5-bromo-4-chloro-3-indolyl phosphate, the luminescence reagent 2-cyclohexylaminoethane sulfonic acid, luminol, and microperoxidase. Levels as low as 1 ng .alpha.-fetoprotein/mL could be measured with good sensitivity by this technique.

MSTR 1



G2 = acyl
G3 = 90



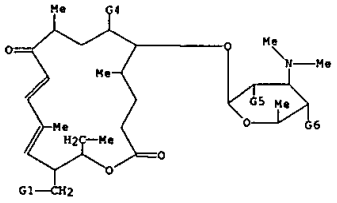
L11 ANSWER 34 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)
MPL: claim 20
NTE: fragment 24 represents galacto-, gluco-, and mannopyranose residues

L11 ANSWER 35 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 116:84105 MARPAT
TITLE: Preparation of 3-deoxytylosin derivatives
INVENTOR(S): Umezawa, Sumio; Tsuchiya, Osamu; Takeuchi, Tomio; Kageyama, Toshiharu; Miyake, Toshiaki
PATENT ASSIGNEE(S): Microbiochemical Research Foundation, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03184991	A2	19910812	JP 1989-322890	19891212

AB The title compds. [I; R1 = H, OH, HOCH2, alkyl, alkoxy, (alkoxy)(halo)tetrahydrofuryl, -tetrahydropyranyl; R2 = Me, CHO; R3 = H, acyl; R4 = H, OH] and their salts, useful as antibacterials (no data), were prepd. Desmycosin was cyclocondensed with ethyleneglycol, the resulting bis(ethylene acetal) dehydrated, the resulting 2-dehydro-2-ene-3-deoxydesmycosin 9,20-bis(ethylene acetal) was reduced with NaBH4 in MeOH contg. NiCl2.6H2O at -20.degree. to give 73% 3-deoxydesmycosin 9,20-bis(ethylene acetal).

MSTR 1



G1 = 26

G2 = 2-tetrahydropyranyl (SO (1-) G3)
G3 = OH / CH2OH
G4 = 49

DER: or salts
MPL: claim 1

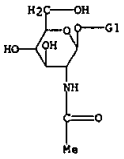
L11 ANSWER 35 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)

L11 ANSWER 36 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 116:59897 MARPAT
TITLE: Preparation of N-acetyl-D-hexosamine derivatives as enzyme substrates for determination of N-acetyl-.beta.-D-hexosaminidase
INVENTOR(S): Ogawa, Yoshisuke; Ito, Hiroshi; Chiba, Hiroshi; Sato, Shigeru; Morita, Satoshi
PATENT ASSIGNEE(S): Kurita Water Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03215492	A2	19910920	JP 1990-6846	19900116

AB D-Hexosamine derivs. (I; one of A1,A2 = H and the other = OH; G = fructose, glucose 6-phosphate, sucrose, or galactose residue) are prepd. in high yield by acetylation of D-hexosamine, conversion of the resulting acetylated D-hexosamine into the 1-thio deriv. [II; R = C(S)NMe2, C(S)NEt2, C(S)OEt, Ac, cyano, etc.] and then into the oxazoline (III), and glycosidation of III with a sugar or its deriv. I allow detn. of N-acetyl-.beta.-D-hexosaminidase by the rate assay with high accuracy without the influences from pH, temp., intrinsic substances (e.g. Hb, bilirubin, and a surfactant), and differences in instrument models. Thus, tetraacetyl-.alpha.-D-glucosaminyl chloride prepd. from HCl (g) and 2.0 g tetraacetyl-D-glucosamine (IV) in AcCl was refluxed with 3.69 g of Me2NC(S)SNa in Me2CO for 15 min to give 95% II [A1 = H, A2 = OAc, R = C(S)NMe2] which (1.2 g) was stirred with 3.91 g HgCl2 and 3.92 g HgO in MeCN for 20 min to give 97% III (A1 = H, A2 = OAc). This (1.38 g) and 2.40 g p-MeC6H4SO3H were dissolved in CH2Cl2, tightly sealed, and stirred at 60.degree. for 22 h to give, after deprotection by treatment with NaOMe in MeOH and hydrogenolysis over Pd black in MeOH, 52.5% (based on IV) I (A1 = H, A2 = OH, G = Q). I can also be used for test paper.

MSTR 1



G1 = 89

L11 ANSWER 36 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)

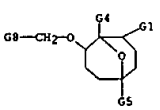
MPL: claim 1
STE: 89-fructose; 32-glucose; 49-sucrose; 70-galactose

L11 ANSWER 37 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 116:59211 MARPAT
TITLE: Preparation of oxabicyclo ethers as herbicides
INVENTOR(S): Powell, James Edward, Jr.; Richardson, Wendy Sue
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: PCT Int. Appl., 290 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9103464	A1	19910321	WO 1990-US4953	19900905
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
CA 2065337	AA	19910312	CA 1990-2065337	19900905
AU 9063474	A1	19910408	AU 1990-63474	19900905
AU 637406	B2	19930527		
JP 05500063	T2	19930114	JP 1990-512759	19900905
EP 593433	A1	19940427	EP 1990-913636	19900905
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
US 5234900	A	19930810	US 1992-838253	19920311
PRIORITY APPLN. INFO.:			US 1989-431734	19890911
			WO 1990-US4953	19900905

AB The title compds. [I-IV; R = PhCH2, 5- or 6-membered heterocyclyl, or Q, each ring optionally substituted; Z = CH2, NH, alkylimino, O, S, or forming a double bond with an adjacent C; l, m = 0-2; R1 = H, Me, Et, Pr; R2 = H, (un)substituted alkyl, alkenyl, alkynyl, Ph; R3-R6 = H, (un)substituted alkyl, alkenyl, alkynyl; X, Y = H, CR3R4OR6; R6 = (un)substituted alkyl, alkenyl, alkynyl, PhCH2], which are herbicidally active on a wide variety of weeds and exhibit safety to rice, cereals, and broadleaf crops, are prepd. Thus, Diels-Alder reaction of 2,5-dimethylfuran with acryloyl chloride in the presence of AlCl3 at -65 to -50.degree. followed by esterification with MeOH contg. Et3N gave 7-oxabicyclo[2.2.1]hept-5-ene (V; R7 = CO2Me). Side-chain redn. of the latter with LiAlH4 in THF and benzylation of the resultant alc. V (R7 = CH2OH) with PhCH2Br in DMF contg. NaH gave V (R7 = CH2OCH2Ph) which underwent oxidn. by m-ClC6H4CO2OH in CH2Cl2 and redn. of the resulting epoxide with Li triethylborohydride in refluxing THF gave I (R = Y = H, R1 = R2 = Me, X = CH2OCH2Ph) and its regioisomer. Approx. 170 compds. including 3 dioxabicyclooctanes III were prepd. and at 400 g/ha preemergence gave .ltoreq.100% control of, e.g. barnyard grass and giant foxtail, and gave none to moderate injury to crops, e.g. wheat, sugar beet, and rice.

MSTR 4A



G5 = alkyl<(1-4)> (SR (1-) G6)
G6 = CN / alkoxycarbonyl<(1-3)> / CO2H

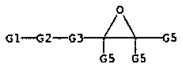
L11 ANSWER 37 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)
G8 = 2-tetrahydropyranyl (SO (1-) G10)
G10 = OMe
MPL: claim 1

L11 ANSWER 38 OF 38 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 110:191278 MARPAT
TITLE: Enzymatic method for preparation of epoxy-substituted aldose or ketose sugars
INVENTOR(S): Godtfredsen, Sven Erik; Bjoerkling, Fredrik
PATENT ASSIGNEE(S): Novo Industri A/S, Den.
SOURCE: Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 268461	A2	19880525	EP 1987-310143	19871117
EP 268461	A3	19891102		
EP 268461	B1	19930303		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
DK 8706017	A	19880519	DK 1987-6017	19871116
DK 159883	B	19901224		
DK 159883	C	19910513		
US 4859589	A	19890822	US 1987-121918	19871117
AT 86305	E	19930315	AT 1987-310143	19871117
ES 2044953	T3	19940116	ES 1987-310143	19871117
JP 63214194	A2	19880906	JP 1987-289649	19871118
PRIORITY APPLN. INFO.:			DK 1986-5498	19861118
			EP 1987-310143	19871117

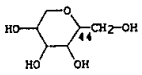
AB Epoxy-substituted aldose or ketose sugars I [sugar = aldose, ketose; Z = O, S attached to terminal anomeric C-1 (aldose) or C-2 (ketose) of the sugar; Y = (substituted)alkylene; R1, R2, R3 = H, (substituted)alkyl or aryl] are prepd. by reacting sugar-O-X [sugar as above, X = H, (substituted) carbohydrate or alkyl or aryl] with hydroxylated or thiolated epoxide II (R1-R3 as above) in the presence of a glycosidase. Thus, o-nitrophenylgalactopyranoside 5 g, 2,3-epoxy-1-propanol 17.5 mL, and .beta.-galactosidase 50 units in 400 mL buffer were incubated for 4 h. The product 2,3-epoxypropyl-.beta.-D-galactopyranoside 1.1 g was prepd. by extn., SiO2 chromatog., and crystn. Various surfactants, e.g. 1-O-tetradecanoyl-3-O-.beta.-D-galactopyranosylglycerol, were prepd. from this epoxide.

MSTR 1



G1 = 44

L11 ANSWER 38 OF 38 MARPAT COPYRIGHT 2002 ACS (Continued)



G2 = O
G3 = alkylene (SO (1-) G4)
G4 = CO2H
MPL: claim 2
NTE: sugar moieties represented by G1 include .beta.D-galactose,D-ribose, D-xylose, D-arabinose, D-mannose,D-glucose,D-fructose, D-lactose, D-cellobiose, and D-maltose

CAS Registry Numbers that were added to the H/Z/CA/CAplus files between 12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches during this period, either directly appended to a CAS Registry Number or by qualifying an L-number with /P, may have yielded incomplete results. As of 1/23/02, the situation has been resolved. Also, note that searches conducted using the PREP role indicator were not affected.

Customers running searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator between 12/27/01 and 1/23/02, are encouraged to re-run these strategies. Contact the CAS Help Desk at 1-800-848-6533 in North America or 1-614-447-3698, worldwide, or send an e-mail to help@cas.org for further assistance or to receive a credit for any duplicate searches.

=> save
ENTER L#, L# RANGE, ALL, OR (END):l5
ENTER NAME OR (END):g002/a

ANSWER SET L5 HAS BEEN SAVED AS 'G002/A'

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COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                               0.32     503.65

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)    SINCE FILE      TOTAL
                                                 ENTRY    SESSION
CA SUBSCRIBER PRICE                               0.00     -37.91

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L5 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2003 ACS (Continued)
CRN 207300-95-6
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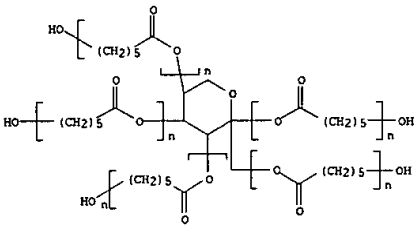

CM 2

CRN 101-68-8
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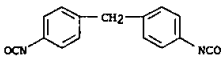
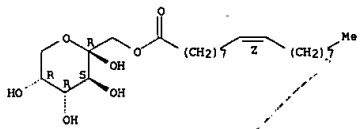


L5 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:305175 CAPLUS
DOCUMENT NUMBER: 129:17255
TITLE: Structure and surface-active property determinations of fructose monooleates
AUTHOR(S): Jung, S.; Coulon, D.; Girardin, M.; Ghoul, M.
CORPORATE SOURCE: LSGC-ENSAIA, Vandoeuvre-les-Nancy, 54500, Fr.
SOURCE: Journal of Surfactants and Detergents (1998), 1(1), 53-57
CODEN: JSDEFL; ISSN: 1097-3958
PUBLISHER: AOCS Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The enzymic synthesis of fructose monooleates led to a mixt. of four isomers (.alpha. and .beta. anomers of 6-fructofuranose and .beta. anomers of 1-fructofuranose and 1-fructopyranose). Surface and interfacial tension, foaming, and emulsifying properties were detd. and compared to those of alkylpolyglycosides, sorbitan oleate, and sodium dodecyl sulfate. Fructose monooleates promoted a significant decrease in both surface and interfacial tension, even at low concn. The crit. micelle concn. of fructose monooleates was detd. as 2.4 .cntdot. 10-4 M. The foam produced by an aq. soln. of fructose monooleates was very stable, indicating that a high energy was needed to desorb these mols. from the interface. Moreover, this biosurfactant exhibited very good emulsion stabilization. The emulsifying power of these mols. was higher than that of sorbitan oleate.
IT **164858-25-7**
RL: PRP (Properties)
(structure and surfactant properties of fructose monooleates)
RN 164858-25-7 CAPLUS
CN .beta.-D-Fructopyranose, 1-[(9Z)-9-octadecenoate] (9CI) (CA INDEX NAME)

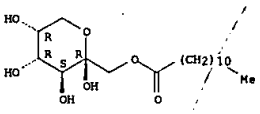
Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

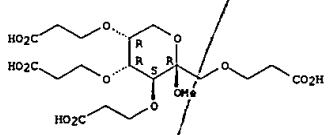
L5 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:800185 CAPLUS
DOCUMENT NUMBER: 128:89061
TITLE: Quantitative enzymic production of 1,6-diacyl fructofuranoses
AUTHOR(S): Arcos, J. A.; Bernabe, M.; Otero, Cristina
CORPORATE SOURCE: Instituto de Catalisis, CSIC, Madrid, 28049, Spain
SOURCE: Enzyme and Microbial Technology (1998), 22(1), 27-35
CODEN: EMTED2; ISSN: 0141-0229
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Three different 1,6-diacyl fructofuranoses have been prepd. enzymically. At low temp. (5.degree.C), the synthesis produces quant. yields of the diester by simple addn. of the original sugar to a soln. of the fatty acid in a solvent (acetone) which is accepted by the EEC for use in the manuf. of food additives. A strategy to reduce the reaction times is also reported. The method is not limited by the low soly. of the sugar in the medium. In contrast with alternative enzymic methods, the indicated method minimizes the solvent/sugar ratio. The stability of the biocatalyst (Novozym 435) is high relative to the required reaction time.
IT **201004-36-6P**
RL: BPN (Biosynthetic preparation); PRP (Properties); BIOL (Biological study); PREP (Preparation)
(quant. enzymic prodn. of diacyl fructofuranoses)
RN 201004-36-6 CAPLUS
CN .beta.-D-Fructopyranose, 1-dodecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:134333 CAPLUS
DOCUMENT NUMBER: 126:252688
TITLE: Valorization of some carbohydrates. Synthesis and study of polycarboxylic acids
AUTHOR(S): Bazin, H.; Bouchu, A.; Descotes, G.; Petit-Ramel, M.
CORPORATE SOURCE: Laboratoire Chimie Organique II, Universite Lyon I, Villeurbanne, F-69622, Fr.
SOURCE: Fresenius Environmental Bulletin (1996), 5(9/10), 574-579
CODEN: FENBEL; ISSN: 1018-4619
PUBLISHER: Fresenius Environmental Bulletin
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The Ca sequestering behavior of 11 carbocylic acids derived from carbohydrates (D-glucopyranoside, methyl-D-fructopyranoside, and methyl-D-fructofuranoside) was studied. The formation consts. of the corresponding Ca complexes were detd. using a Ca selective electrode. The Ca complexation strength increased with increasing no. of carboxylic groups. The Ca sequestering properties were less effective than those of citric acids. Comparison of the complexing properties of the tetracarboxylic derivs. showed that pyranic derivs. were more effective than furanic derivs.
IT **172606-64-3**
RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(calcium sequestering of carbohydrate poly carboxylic acids as potential biodegradable detergent additive)
RN 172606-64-3 CAPLUS
CN .beta.-D-Fructopyranoside, methyl 1,3,4,5-tetrakis-O-(2-carboxyethyl)- (9CI) (CA INDEX NAME)

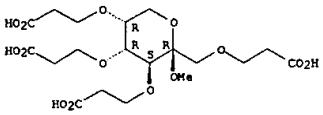
Absolute stereochemistry.



IT **172606-64-3DP**, calcium complexes
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(stability consts. for)
RN 172606-64-3 CAPLUS
CN .beta.-D-Fructopyranoside, methyl 1,3,4,5-tetrakis-O-(2-carboxyethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L5 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2003 ACS (Continued)



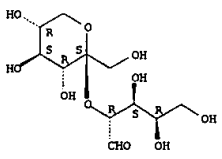
L5 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:135666 CAPLUS
DOCUMENT NUMBER: 124:202942
TITLE: Method for producing xylose-bonded oligosaccharides having activity of Bifidus growth factor by enzymic transglycosidation
INVENTOR(S): Fujita, Takateru; Kitaoka, Kumiko; Takahashi, Hideki; Kitahata, Sumio; Nakano, Hirobumi; Kondo, Masao; Taniguchi, Hajime; Hashimoto, Hitoshi
PATENT ASSIGNEE(S): Ensuiko Sugar Refining, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07278170	A2	19951024	JP 1994-92904	19940407

PRIORITY APPLN. INFO.: JP 1994-92904 19940407
OTHER SOURCE(S): CASREACT 124:202942
AB Oligosaccharides in which lactose, L-fucose, or L-sorbose is bonded to xylose through the .beta.-anomeric bond, more specifically oligosaccharides (I, II, and III; R = Q), which are useful as sweetening agents and materials for functional foods and drugs, are prepd. by reacting a liq. contg. an glucosylxylose (glycosyl donor substrate) with an aldose or ketose (receptor substrate), preferably lactose, L-fucose, or L-sorbose, in the presence of an enzyme having fructose transferring activity and/or yeast, preferably .beta.-fructofuranosidase derived from Arthrobacter sp. K-1. Thus, 50 g lactose and 50 g glucosylxyloside (2-O-.beta.-D-glucopyranosyl-D-xylose) were dissolved in a buffer soln. (pH 6.5), followed by adding .beta.-fructofuranosidase derived form Arthrobacter sp. (200 unit per 1 g glucosylxyloside) and 50 mg yeast (Saccharomyces cerevisiae) and making the total sugar concn. to 40 wt.%, and the resulting mixt. was allowed to react at 35.degree. with maintaining pH 6-7 to give a soln. contg. 58% lactosylxylose I. The soln. was heated for deactivating the enzyme and stopping the glucose utilization by the yeast, ultracentrifuged to remove the yeast, decolorized and desalted using activated charcoal and an ion exchange resin, and lyophilized to give 83 g I. I - III were utilized by Bifidobacterium but not easily utilized by other (potentially) harmful bacteria of human intestine, e.g Bacteroides, Clostridium, Eubacterium, Fusobacterium, Peptostreptococcus, Enterococcus, and Escherichia.
IT **174173-49-0P**
RL: BPN (Biosynthetic preparation); FFD (Food or feed use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of xylose-contg. oligosaccharides having activity of Bifidus growth factor as sweetening agents)
RN 174173-49-0 CAPLUS
CN D-Xylose, 2-O-.beta.-D-sorbopyranosyl- (9CI) (CA INDEX NAME)

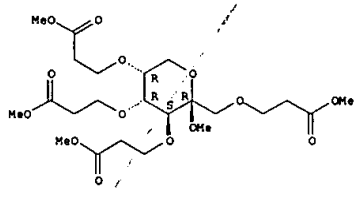
Absolute stereochemistry.

L5 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2003 ACS (Continued)



L5 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:900627 CAPLUS
DOCUMENT NUMBER: 124:117808
TITLE: Hydrolysis of cyanoethylated carbohydrates: synthesis of new carboxylic derivatives of sucrose, D-glucose and D-fructose
AUTHOR(S): Bazin, Helene; Bouchu, Alain; Descotes, Gerard
CORPORATE SOURCE: Lab. Chimie Organique II, Univ. Lyon I, Villeurbanne, F-69622, Fr.
SOURCE: Journal of Carbohydrate Chemistry (1995), 14(8), 1187-207
CODEN: JCACDM; ISSN: 0732-8303
PUBLISHER: Dekker
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Synthesis of new cyanoethylated compds. and carboxylic acids derived from sucrose, Me D-glucopyranoside, Me D-fructopyranoside and Me D-fructofuranoside are described. Basic hydrolysis of these cyanoethylated compds. to the corresponding amides and carboxylates and acidic alcoholysis to the corresponding Me esters are discussed.
IT **172911-82-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(hydrolysis of cyanoethylated carbohydrates in synthesis of sucrose and glycoside carboxylates)
RN 172911-82-9 CAPLUS
CN .beta.-D-Fructopyranoside, methyl 1,3,4,5-tetrakis-O-(3-methoxy-3-oxopropyl)- (9CI) (CA INDEX NAME)

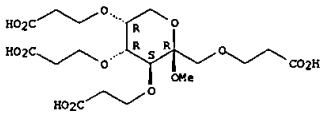
Absolute stereochemistry.

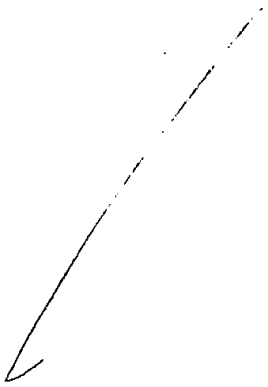


IT **172606-64-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(hydrolysis of cyanoethylated carbohydrates in synthesis of sucrose and glycoside carboxylates)
RN 172606-64-3 CAPLUS
CN .beta.-D-Fructopyranoside, methyl 1,3,4,5-tetrakis-O-(2-carboxyethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L5 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2003 ACS (Continued)





L5 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2003 ACS

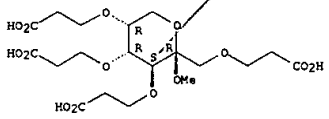
ACCESSION NUMBER: 1995:871882 CAPLUS
DOCUMENT NUMBER: 124:87628
TITLE: Comparison of calcium complexation of some carboxylic acids derived from D-glucose and D-fructose
AUTHOR(S): Bazin, Helene; Bouchu, Alain; Descotes, Gerard; Petit-Ramel, Michelle
CORPORATE SOURCE: Lab. Chimie Organique II, Univ. Lyon I, Villeurbanne, F-69622, Fr.
SOURCE: Canadian Journal of Chemistry (1995), 73(8), 1338-47
CODEN: CJCHAG; ISSN: 0008-4042
PUBLISHER: National Research Council of Canada
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The aim of this work was to compare calcium sequestering behavior of 11 carboxylic acids derived from carbohydrates, and to study the influence of mol. structure on the calcium complexation. For this purpose, various carboxylic acids derived from Me D-glucopyranoside, Me D-fructopyranoside, and Me D-fructofuranoside were synthesized and studied using an ion selective electrode to det. calcium complex formation consts. Complexation sites of carbohydrate skeletons were detd. using 13C NMR.

IT **172606-64-3D**, calcium complexes
RL: PRP (Properties)
(influence of mol. structure on calcium complexation of some carboxylic acids derived from D-glucose and D-fructose)

RN 172606-64-3 CAPLUS
CN .beta.-D-Fructopyranoside, methyl 1,3,4,5-tetrakis-O-(2-carboxyethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2003 ACS

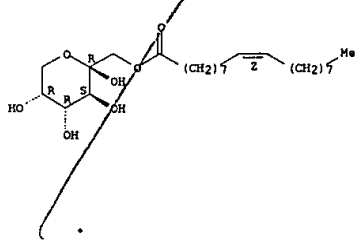
ACCESSION NUMBER: 1995:487484 CAPLUS
DOCUMENT NUMBER: 123:56400
TITLE: Comparison of direct esterification and transesterification of fructose by Candida antarctica lipase
AUTHOR(S): Coulon, D.; Girardin, M.; Rovel, B.; Ghoul, M.
CORPORATE SOURCE: Groupe Lipoprocedes l'INPL, E.N.S.A.I.A., Vandoeuvre les Nancy, 54500, Fr.
SOURCE: Biotechnology Letters (1995), 17(2), 183-6
CODEN: BILED3; ISSN: 0141-5492
PUBLISHER: Chapman and Hall
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Fructose oleates synthesis was performed in a batch reactor by trans- or direct esterification. An immobilized lipase from Candida antarctica was used. When a solvent was used, 65% and 46% of conversion of fructose were obtained by transesterification and direct esterification, resp. These two reactions were also compared in a solvent-free melt. Both in molten media and with cosolvent, two isomeric forms of fructose oleates were produced.

IT **164858-25-7P**
RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)
(comparison of direct esterification and transesterification of fructose by Candida antarctica lipase)

RN 164858-25-7 CAPLUS
CN .beta.-D-Fructopyranose, 1-[(9Z)-9-octadecenoate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L5 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2003 ACS

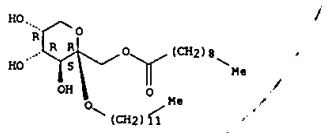
ACCESSION NUMBER: 1995:461997 CAPLUS
DOCUMENT NUMBER: 123:228667
TITLE: Selective lipase-catalyzed esterification of alkyl glycosides
AUTHOR(S): de Goede, A. T. J. W.; van Oosterom, M.; van Deurzen, M. P. J.; Sheldon, R. A.; van Bekkum, H.; van Rantwijk, F.
CORPORATE SOURCE: Laboratory Organic Chemistry and Catalysis, Delft University Technology, Delft, 2628 BL, Neth.
SOURCE: Biocatalysis (1994), 9(1-4), 145-55
CODEN: BIOCED; ISSN: 0886-4454
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Alkyl derivs. of glucose, galactose and fructose were acylated by lipase-catalyzed transesterification with alkanoic esters. The best results were obtained with immobilized lipases of the Candida antarctica type. Primary alc. functions were acylated first, followed by secondary ones depending on the structure of the glycoside. The water activity in the reaction medium had a striking effect on both the rate and the selectivity of the process. The size and orientation of the alkyl substituent and the structure of the acyl acceptor were also found to exert a profound influence on the course of the reaction.

IT **154992-72-0P**
RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)
(regioselective lipase-catalyzed esterification of alkyl glycosides)

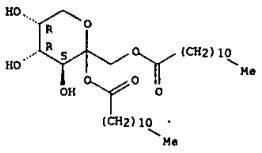
RN 154992-72-0 CAPLUS
CN .beta.-D-Fructopyranoside, dodecyl, 1-decanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



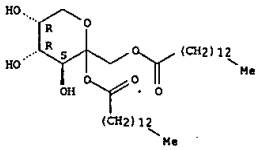
L5 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2003 ACS (Continued)
RN 20750-09-8 CAPLUS
CN Fructopyranose, 1,2-dilaurate, D- (8CI) (CA INDEX NAME)

Absolute stereochemistry.



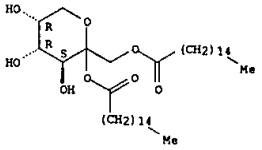
RN 20814-82-8 CAPLUS
CN Fructopyranose, 1,2-dimyristate, D- (8CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 20970-99-4 CAPLUS
CN Fructopyranose, 1,2-dipalmitate, D- (8CI) (CA INDEX NAME)

Absolute stereochemistry.



=> d ibib ab fqhit 1-41

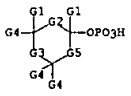
L8 ANSWER 1 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 138:39496 MARPAT
TITLE: Drying of sugar 1-phosphate salts and storage of their crystals and their solutions
INVENTOR(S): Matsuba, Yasuko; Ishibashi, Hiroki; Nagahara, Kiyoteru
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002371091	A2	20021226	JP 2001-179655	20010614

PRIORITY APPLN. INFO.: JP 2001-179655 20010614

AB Salts of sugar 1-phosphates I [R1, R2 = H, Me, CH2OH, CO2H; R3 = H, acyl, sulfonyl; X = halo, alkoxy, alkylthio; W = O, S; Z = O, S, (un)substituted C; n, r = 0, 1; p, q = 0-3' if Z = O or S, then p + r .ltoreq. n + 1, q .ltoreq. 2 .times. (n + 1) - 2 .times. (p + r); if Z = C, then p + r .ltoreq. n + 2, q .ltoreq. 2 .times. (n + 2) - 2 .times. (p + r)], useful as materials for manuf. of drugs and nutritious foods, are dried under conditions where pH of aq. soln. of the drying crystal is .gtoreq.7.5. Salts of I are stored in the crystal form at .ltoreq.30.degree.. Solns. of I are stored at pH .gtoreq.9. Degrdn. of I during storage is prevented by keeping basicity of I upon salt formation. Wet crystal of 2-deoxy-.alpha.-D-ribose-1-phosphate ammonium salt (prepn. given) was vacuum-dried at .ltoreq.50.degree. for 1 h to show content 101.0% and pH of 2% aq. soln. of the dried crystal was 7.7.

MSTR 1



G1 = CH2OH
G2 = O
G3 = 13

G4 = OH
G5 = 16

L8 ANSWER 1 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

G6 = alkylcarbonyl
MPL: claim 1
NTE: substitution is restricted
NTE: as salts

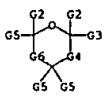
L8 ANSWER 2 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 137:385070 MARPAT
TITLE: Method for preparation of 1-phosphorylated sugar derivative by phosphorolysis of 1-halogenated sugar derivative
INVENTOR(S): Fukuiri, Yasushi; Awano, Hirokazu; Ishibashi, Hiroki; Nagahara, Kiyoki
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002338591	A2	20021127	JP 2001-150936	20010521

PRIORITY APPLN. INFO.: JP 2001-150936 20010521
OTHER SOURCE(S): CASREACT 137:385070

AB A highly versatile method for prepn. of sugar-1-phosphate deriv. in high yield comprises phosphorolysis of 1-halogenated sugar deriv. with phosphoric acid in the presence of base which provides an anomer selectivity by optimizing reaction temp. and a quantity of phosphoric acid, base, and solvent used. More specifically, 1-halogenated sugar deriv. [I; R1, R2 = H, Me, protected hydroxymethyl or CO2H; R3 = acyl, sulfonyl; R4 = HO-protecting group; X = halo, alkoxy, alkylthio; Y = halo; Z = O, S, (un)substituted CH2; m, n = 0,1; p, q = an integer of 0-3; provided that when Z is O or S, a relationship of p+m.ltoreq.n+1 and q.ltoreq.2X(n+1)-2S(p+m) is satisfied; or when Z is CH2, a relationship of p+m.ltoreq.n+2 and q.ltoreq.2X(n+2)-2X(p+m) is satisfied] undergoes phosphorolysis with phosphoric acid and base wherein a molar ratio of phosphoric acid and base of from 2.5:1 to 5:1 is used so that the equil. between an anomeric mixt. of a sugar-1-phosphate deriv. (II; R1 -R4, 2, m, n, p, q = same as above) or salt thereof is shifted by selectively crystg. either one of .alpha. and .beta.-anomer to selectively obtain .alpha. or .beta.-anomer of II or salt thereof. The preferred phosphorolysis temp. is -20.degree. to 5.degree. and the quantity of solvent used is 5 to 15 wt. times greater than that of the 1-halogenated sugar deriv. I. II widely occurs in nature and is a substrate of various enzymes and useful as a raw material for drugs and nutritional food. Unnatural II is an intermediate for antiviral agents and enzyme inhibitors. Thus, an azeotropically dried 13.5% H3PO4/methyl iso-Bu ketone (124.1 g) contg. of 0.171 mol H3PO4 and 290 ppm H2O was mixed with 87.1 g Me iso-Bu ketone contg. 100 ppm to prep. a H3PO4 soln., followed by adding 10.6 g tri-n-butylamine in a 3.0:1 ratio of H3PO4 and Bu4N, the resulting soln. was cooled with stirring, treated with 28.6 g 3,5-O-bis(4-chlorobenzoyl)-2-deoxy-.alpha.-ribofuranosyl chloride, and stirred at -14 to -17.degree. for 20 h to give 92% 3,5-O-bis(4-chlorobenzoyl)-2-deoxy-.alpha.-ribofuranose-1-phosphoric acid.

MSTR 1



L8 ANSWER 2 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

G2 = CH2OH (SO)
G3 = OPO3H2
G4 = 36

G5 = OH (SO)
G6 = 39

G8 = acyl
MPL: claim 1
NTE: substitution is restricted

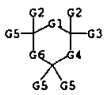
L8 ANSWER 3 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 137:309602 MARPAT
TITLE: Industrial manufacture of nucleosides
INVENTOR(S): Matsuba, Yasuko; Ishibashi, Hiroki; Nagahara, Kiyoteru
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002302498	A2	20021018	JP 2001-104777	20010403

PRIORITY APPLN. INFO.: JP 2001-104777 20010403

AB Nucleosides I [B = base selected from (substituted) pyrimidine, (substituted) purine, (substituted) azapurine, and (substituted) deazapurine; R1', R2' = H, Me, hydroxymethyl, carboxyl; R3' = H, acyl, SO2; X = halo, alkoxy, alkylthio; W = O, S; Z = O, S (substituted) C; n, r = 0, 1; p, q = 0-4; when Z is O or S, then p + r .ltoreq. n + 1 and q .ltoreq. 2 .times. (n + 1) - 2 .times. (p + r); when Z is C, then p + r .ltoreq. n + 2 and q .ltoreq. 2 .times. (n + 2) - 2 .times. (p + r)], useful as raw materials for pharmaceuticals, are manufd. by deprotection reaction and exchange reaction between phosphate groups and bases from compds. II (R1, R2 = H, Me, protected hydroxymethyl, protected carboxyl; R3 = acyl, SO2; R4 = protective group for OH; X, W, Z, n, p, q, r = same as above) or their salts without isolation of compds. III (R1'-R3', X, W, Z, n, p, q, r = same as above) or their salts as crystals. 3,5-O-bis(4-chlorobenzoyl)-2-deoxy-D-ribose 1-phosphate (prepn. given) was stirred with aq. KOH at 60.degree. for 11 h, the reaction mixt. was cooled to 5.degree., filtered, and the filtrate contg. 2-deoxyribose 1-phosphate was adjusted to pH 8.5 and treated with adenine in the presence of an enzyme prepn. of purine nucleoside phosphorylase-producing Escherichia coli transformant MT-10905 at 30.degree. for 24 h to give 2'-deoxyadenosine in 91.4% yield (based on adenine).

MSTR 1



G1 = O
G2 = CH2OH
G3 = OPO3H2
G4 = 36

L8 ANSWER 3 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

G5 = OH
G6 = 39

G13 = acyl
MPL: claim 1
NTE: substitution is restricted
NTE: or salts

L8 ANSWER 4 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 137:279419 MARPAT
TITLE: Preparation of neuraminic acids and analogs useful for inhibiting paramyxovirus neuraminidase
INVENTOR(S): Chand, Pooran; Babu, Yarlagadda S.; Rowland, Scott R.; Lin, Tsu-Hsing
PATENT ASSIGNEE(S): Biocryst Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

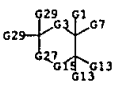
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002076971	A1	20021003	WO 2002-US7052	20020308

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-273952P 20010308

AB Neuraminic acids and analogs, e.g. I, wherein X is CHR, O, NR, N-OR, NR(O), S, S(O) and SO2; R is H, alkyl, alkene, alkyne, CN, NO2, N3, halo, substituted amine; R1 is H, (CH2)n-CO2R6, (CH2)n-tetrazol, (CH2)nSO3H, (CH2)nSO2H, (CH2)nPO3H2, (CH2)nCO-NHR6, (CH2)nNO2, and (CH2)nCHO; R2 is H, halo, CN, (CH2)n-CO2R6, (CH2)n-amine, (CH2)n-OR6; each of R3 and R3' are independently H, NHSO2R6, N(O)-SO2R6, NR6SO2R7, (CH2)mYR6; at least one of R3 and R3' should be other than H; Y is O, NH, NHC(O), C(O)NH, S, S(O), S(O)O, NHS(O)O, S(O)ONH, NHC(O)NH and heterocycle; R3 and R3' together may be O, CHR6, NR6 and N-OR6; R4 and R4' is independently selected from the group consisting of: H, (CH2)mYR6 and (CH2)mYR6; R4 and R4' together may be O, CHR6, NR6 and N-OR6; R5 and R5' are independently alkyl, ether, alkylamine, amide; R6 and R7 are individually H, alkyl, substituted alkyl, aryl, arylalkyl, heterocycle, alkenyl, alkynyl; m and n are individually 0-4, were prepd. useful for inhibiting paramyxovirus neuraminidase (no data). Thus, (2R,3R,4S)-3-(acetylamino)-4-[(thien-2-ylsulfonyl)amino]-2-((1R,2R)-1,2,3-trihydroxypropyl)-3,4-dihydro-2H-pyran-6-carboxylic acid was prepd. as paramyxovirus neuraminidase inhibitor (no data).

MSTR 1



G3 = O
G8 = alkylene<EC (1-4) C, DC (0) H3>
G10 = O
G15 = 81

L8 ANSWER 4 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

G20 = O
G22 = C(O)
G27 = 163

G29 = OMe (SO) / CH2OMe (SO)
MPL: claim 1
NTE: and pharmaceutically acceptable salt, and prodrugs

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 137:279413 MARPAT
TITLE: Method for preparation of 1-phosphorylated sugar derivative by phosphorolysis of 1-halogenated sugar derivative with phosphoric acid
INVENTOR(S): Fukuiri, Yasushi; Kurino, Hirokazu; Ishibashi, Hiroki; Nagahara, Kiyoteru
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

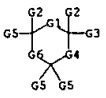
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002284792	A2	20021003	JP 2001-93229	20010328

PRIORITY APPLN. INFO.: JP 2001-93229 20010328
OTHER SOURCE(S): CASREACT 137:279413

AB A highly versatile method for prepn. of natural or unnatural sugar-1-phosphoric acid deriv. in high yields, which is a substrate for various enzymes and useful as a raw material for health foods and drugs such as antiviral agents and enzyme inhibitors, is provided. 1-Phosphorylated sugar deriv. [I; R1, R2 = H, Me, protected hydroxymethyl or CO2H; R3 = acyl, sulfonyl; R4 = hydroxy-protecting group; X = halo, alkoxy, alkylthio; W = O, S, (un)substituted CH2; n = 0,1; p, q = an integer of 0-4; m = 0,1; provided that when Z is O or S, the condition of p+m.ltoreq.n+1 and q.ltoreq.2.times.(n+1)-2.times.(p+m) is satisfied; when Z is CH2, the condition of p+m.ltoreq.n+2 and q.ltoreq.2.times.(n+2)-2.times.(p+m) is satisfied] or salt thereof is prepd. by phosphorolysis of 1-halogenated sugar deriv. [II; Y = halo; R1-R4, X, W, Z, m, n, p, q = same as above] which is carried out by azeotropically removing moisture from phosphoric acid and solvent used in the reaction. The azeotropic removal of water present in phosphoric acid and solvent is carried out at the temp. of .ltoreq.100.degree. using a solvent having b.p. of .gtoreq.100.degree.. Thus, a mixt. of 15.4 g 89% H3PO4 contg. 11% H2O and 157.6 g Me iso-Bu ketone underwent azeotropic dehydration in a reaction vessel fitted with a Dean Stark trap under reduced pressure at the reflux temp. of 40.degree.. After the azeotropic dehydration, the water content of the reaction mass was 420 ppm. To the reaction mass was added 76.8 g Me iso-Bu ketone, followed by distg. off 78.6 g of the solvent which resulted in reducing the water content in the reaction mass to 160 ppm (7 mol% against the 1-halogenated sugar). To the phosphoric acid soln. thus obtained was added 8.6 g tri-n-butylamine and cooled to 5.degree. with stirring, followed by adding 23.6 g 3,5-O-bis(4-chlorobenzoyl)-2-deoxy-.alpha.-D-ribofuranosyl chloride (III; Y = Cl) (85% purity), and the resulting mixt. was stirred for 5 h to give 85.1% 3,5-O-bis(4-chlorobenzoyl)-2-deoxy-.alpha.-D-ribofuranose-1-phosphoric acid III [Y = OP(O)(OH)2].

MSTR 1

L8 ANSWER 5 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)



G1 = O
G2 = CH2OH (SO)
G3 = OPO3H2
G4 = 36

G5 = OH (SO)
G6 = 39

G11 = acyl
MPL: claim 1
NTE: substitution is restricted

L8 ANSWER 6 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 137:179916 MARPAT
TITLE: Compositions and methods for the treatment of glaucoma or ocular hypertension using nucleotide 5'-diphosphate glycopyranosides
INVENTOR(S): Boyer, Jose L.; Yerxa, Benjamin R.; Plourde, Robert; Brown, Edward G.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 18 pp., Cont.-in-part of U. S. Ser. No. 934,970.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

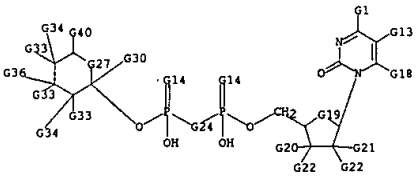
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002128224	A1	20020912	US 2002-87551	20020227
US 2002052337	A1	20020502	US 2001-934970	20010821

PRIORITY APPLN. INFO.: US 2000-643138 20000821
US 2001-934970 20010821

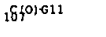
AB The present invention is directed to a method of reducing intraocular pressure. The method comprises administering to a subject a pharmaceutical compn. comprising in effective amt. of a nucleotide 5'-pyrophosphate pyranoside or analogs I wherein X1 is independently O, NR1, S, CF2, CF3, CN, bond; X2 is H, halogen, CN, ether, thioether, amine, CF3, alkyl, cycloalkyl, arylalkyl, aryl, arylalkenyl, arylalkynyl, acyl, ester, amide, heterocycle; X3 is H, CN, ether, thioether, amine, CF3, alkyl, cycloalkyl, acyl, ester, amide arylalkyl, aryl, arylalkenyl, arylalkynyl, heterocycle; R is H, alkyl, cycloalkyl, arylalkyl, aryl, heterocycle, acyl, ester, amide; R1 is H, ether, alkyl, cycloalkyl, arylalkyl, aryl, acyl, ester, amide; E is O, CH2; E1, E2 are independently H, F; E1E2 together are C-C bond; Y1 and Y2 are independently O, F, with the proviso that when Y1 and Y2 are F, then M1 and M2 are absent; M1 and M2 are independently H, alkyl, cycloalkyl, arylalkyl, acyl, ester, amide; Z is O, substituted nitrogen, CH2, CHF, CF2, CCl2, CHCl; Z1 and Z2 are independently O, S; Q is heterocycle, sugar residue. The method of the present invention is useful in the treatment or prevention of ocular hypertension, such as found in glaucoma, including primary and secondary glaucoma. The method can be used alone to reduce intraocular pressure. The method can also be used in conjunction with another therapeutic agent or adjunctive therapy commonly used to treat glaucoma to enhance the therapeutic effect of reducing the intraocular pressure. The present invention also provides a novel compn. comprising a nucleotide 5'-pyrophosphate pyranoside or analogs. The action of UDP-.alpha.-D-glucose (II) on intraocular pressure (IOP) was assessed in New Zealand white rabbits. Effect of II produced a time-dependent redn. in IOP, which was maximal from 0.5 to 5 h with a redn. of 26% (n=4). This lowering of intraocular pressure in rabbits by II demonstrates the utility of UDP-.alpha.-D-glucose for treating ocular hypertension and glaucoma.

MSTR 1

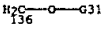
L8 ANSWER 6 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)



G11 = Ak<(1-8)> (SO (1-) G5)
G23 = 107



G27 = O
G30 = 136



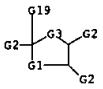
G34 = OH
G36 = OH
MPL: claim 1
NTE: additional ring formation also claimed
NTE: or pharmaceutically acceptable salts
NTE: substitution is restricted
STE: and diastereomers or enantiomers

L8 ANSWER 7 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 136:263380 MARPAT
TITLE: Carbohydrate based lipid compositions and supramolecular structures comprising same
INVENTOR(S): Grinstaff, Mark W.; Hird, Geoffrey S.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 28 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002035082	A1	20020321	US 2001-877391	20010608
PRIORITY APPLN. INFO.:			US 2000-210694P	20000609

AB Lipids such as I (n = 10, 12, and 18) were prepd. Examples are also given for thermal anal., x-ray diffraction, cholesterol interactions, and phospholipase assays. The lipids have supramol. structure and may be used in prepn. of liposomes for drug delivery.

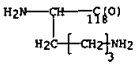
MSTR 1



G1 = (1-3) 10

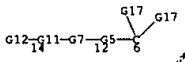
G2 = OH
G3 = O
G7 = 22-14 23-12

G12 = 118



L8 ANSWER 7 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

G19 = 6



MPL: claim 1
NTE: substitution is restricted

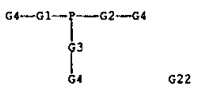
L8 ANSWER 8 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 135:312738 MARPAT
TITLE: Ternary ligand complexes containing highly functionalized triphenylphosphines useful as radiopharmaceuticals
INVENTOR(S): Liu, Shuang
PATENT ASSIGNEE(S): Dupont Pharmaceuticals Company, USA
SOURCE: PCT Int. Appl., 210 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001077122	A1	20011018	WO 2001-US11387	20010406
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 2002012631	A1	20020131	US 2001-826449	20010405
EP 1268497	A1	20030102	EP 2001-924822	20010406
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
PRIORITY APPLN. INFO.:			US 2000-195235P	20000407
			WO 2001-US11387	20010406

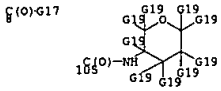
AB This invention relates to novel highly functionalized triphenylphosphine ligands as ancillary ligands in radiopharmaceuticals. Also, this invention provides radiopharmaceuticals comprised of highly functionalized phosphine ligated 99mTc labeled hydrazinonicotinamide (HYNIC)-conjugated biomols. that selectively localize at sites of disease and thus allow an image to be obtained of the loci using gamma scintigraphy. The chelator-modified biomols. include IIb/IIIa antagonists, tuftsin, receptor antagonists, chemotactic peptides, vitronectin receptor antagonists, tyrosine kinase inhibitors, and aminocarboxylates. The invention also provides methods of use of the radiopharmaceuticals as imaging agents for the diagnosis of cardiovascular disorders such as thromboembolic disease or atherosclerosis, infectious disease and cancer. The invention further provides kits for the prepn. of the radiopharmaceuticals. The highly functionalized phosphines contain hydroxy or polyhydroxy functionalities which are of interest because they can form neutral 99mTc complexes. The highly functionalized phosphines can contain carboxy or polycarboxy functionalities which are used to increase hydrophilicity and to improve blood clearance and renal excretion of the 99mTc-labeled biomol. The highly functionalized phosphines can also contain metabolizable ester or polyester functionalities and form neutral 99mTc complexes (if there is no charge on the biomol.), which can cross the cell membrane and potentially bind intracellular receptors. In an example, the functionalized ligand P(C6H4(CONHCH2CH2OH)-p)3 (L3) was prepd. The ligand was reacted with [99mTc]pertechnetate in the presence of HYNIC-Ln-Q, a HYNIC-conjugated biomol., and with tricine, to give [99mTc(HYNIC-Ln-Q)(tricine)(L3)] in >70% yield.

MSTR 1

L8 ANSWER 8 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)



G4 = 8 / 105



G17 = alkyl<(1-10)> (SO)
G19 = OH / 155

G20 = OH
MPL: claim 1
NTE: and radiopharmaceuticals with G22 metals or pharmaceutically acceptable salt forms
NTE: additional oxo substitution also claimed
NTE: substitution is restricted

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

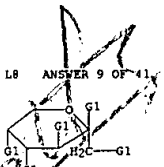
L8 ANSWER 9 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 134:227367 MARPAT
TITLE: High viscosity liquid controlled delivery system and medical or surgical device
INVENTOR(S): Gibson, John W.; Sullivan, Stacey A.; Middleton, John G.; Tipton, Arthur J.
PATENT ASSIGNEE(S): Southern Biosystems, Inc., USA
SOURCE: PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001015734	A2	20010308	WO 2000-US23270	20000824
WO 2001015734	A3	20010913		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6413536	B1	20020702	US 1999-385107	19990827
EP 1212092	A2	20020612	EP 2000-961358	20000824
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003508449	T2	20030304	JP 2001-520145	20000824

PRIORITY APPLN. INFO.: US 1999-385107 19990827
US 1995-474337 19950607
US 1995-478450 19950607
US 1997-944022 19970915
WO 2000-US23270 20000824

AB The present invention relates to novel nonpolymeric compds. and comps. that form liq., high viscosity materials suitable for the delivery of biol. active substances in a controlled fashion, and for use as medical or surgical devices. The materials can optionally be dild. with a solvent to form a material of lower viscosity, rendering the material easy to administer. This solvent may be water insol. or water sol., where the water sol. solvent rapidly diffuses or migrates away from the material in vivo, leaving a higher viscosity liq. material. A compd. 1,6-hexanediol lactate 5-hydroxycaproic acid was prepd. and dissolved in N-methylpyrrolidone at a wt. ratio of 70:30, and then 10 % bupivacaine base was added to this mixt. and dissolved. Drops weighing approx. 100 mg were pptd. into 40 mL buffer. Samples of buffer were removed at specified times and replaced with fresh buffer. Buffer samples were analyzed by UV-vis spectrophotometry at 265 nm to det. the concn. of bupivacaine in each buffer sample.

MSTR 4



L8 ANSWER 9 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

G1 = OH / alkanoyloxy (SO OH)
MPL: claim 31

L8 ANSWER 10 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 134:178271 MARPAT
TITLE: Process for preparing substituted cyclohexanoic acids via .alpha.-chloroepoxy esters
INVENTOR(S): Diederich, Ann M.; Novak, Vance J.
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

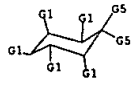
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001010822	A1	20010215	WO 2000-US21394	20000804
W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CZ, DZ, EE, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, TZ, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
BR 2000013025	A	20020416	BR 2000-13025	20000804
EP 1200394	A1	20020502	EP 2000-953844	20000804
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003506431	T2	20030218	JP 2001-515289	20000804
NO 2002000561	A	20020205	NO 2002-561	20020205

PRIORITY APPLN. INFO.: US 1999-147576P 19990806
WO 2000-US21394 20000804

OTHER SOURCE(S): CASREACT 134:178271

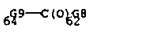
AB A process for prepg. substituted cyclohexanoic acids I is proposed, where Ra is a carbon-contg. group optionally linked by oxygen, sulfur or nitrogen to the cyclohexyl ring and n is 1-10; and R and R* are independently but not simultaneously hydrogen or C(O)E where E is OR14 or SR14, where R14 is hydrogen or alkyl of 1-6 carbon atoms; which process comprises treating an epoxide II with DMSO and an alkali metal salt, wherein E is OR14 or SR14, where R14 is hydrogen or alkyl of 1-6 carbon atoms; Ra is the same as defined for I; and Y is Br, Cl, F or I. Thus, .alpha.-chloroepoxy ester III was prepd. via reaction of 4-cyano-4-(3-cyclopentyloxy-4-methoxyphenyl)cyclohexan-1-one with Me dichloroacetate and tert-butoxide in THF, subsequently sapond. and the corresponding chloroepoxy acid treated with DMSO, NaCl and water, and heated to 150 .degree.C for 3.5 h to yield IV (59%).

MSTR 1

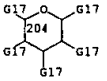


G7 = 64-61 62-52

L8 ANSWER 10 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)



G8 = alkylene<(1-)> (SO (1-) G11)
G9 = O
G12 = alkylene<(1-)> (SO (1-) G11)
G13 = 204



G17 = OH
MPL: claim 1
NTE: substitution is restricted

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

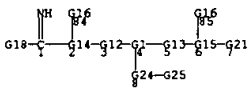
L8 ANSWER 11 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 133:17462 MARPAT
TITLE: Preparation of hydroxyalkylheteroaromatics as factor Xa inhibitors
INVENTOR(S): Phillips, Gary B.
PATENT ASSIGNEE(S): Berlex Laboratories, Inc., USA
SOURCE: PCT Int. Appl., 71 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000031068	A1	20000602	WO 1999-IB2067	19991117
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6262088	B1	20010717	US 1998-196921	19981119
EP 1131315	A1	20010912	EP 1999-959637	19991117
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002530401	T2	20020917	JP 2000-583896	19991117
US 2001023291	A1	20010920	US 2001-849133	20010504
US 2001023292	A1	20010920	US 2001-849146	20010504
US 6492376	B2	20021210		
US 2001025108	A1	20010927	US 2001-849319	20010504
US 6495574	B2	20021217		
US 2001044536	A1	20011122	US 2001-849121	20010504
US 6495684	B2	20021217		
US 2001044537	A1	20011122	US 2001-849335	20010504

PRIORITY APPLN. INFO.: US 1998-196921 19981119
WO 1999-IB2067 19991117

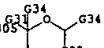
AB Title compd. I [R = 1-methylimidazolin-2-yl (sic)] was prepd. Data for biol. activity of title compds. were given.

MSTR 1



G5 = 36

L8 ANSWER 11 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)



G9 = alkylene<(1-6)>
G24 = O
G25 = 305

G27 = O
G33 = (0-1) 308

G37 = (1-2) CH2
DER: or pharmaceutically acceptable salts
MPL: claim 1
NTE: substitution is restricted
STE: single stereoisomer or mixture

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 12 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 132:12479 MARPAT
TITLE: combinatorial libraries and solid phase synthesis of glycosides and glycopeptides
INVENTOR(S): Sofia, Michael J.; Jain, Rakesh K.; Vaughan, Andrew; Gange, David M.; Ghosh, Manuka
PATENT ASSIGNEE(S): Incara Pharmaceuticals Corp., USA
SOURCE: PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9961583	A2	19991202	WO 1999-US12032	19990528
WO 9961583	A3	20000406		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 1998-87072P 19980528

AB A compd. of structure I wherein X is O or S; Z is O or NH; Y is COOH, COOR2 , CH2OR3, CH3, or CH3Y2(3-s) where Y2 is F, Cl, Br or I, and s is 0, 1, or 2 or Y and one of ZR4 and OR5 are linked to form a 6-membered cyclic acetal; Q = (CH2)n; p is 0 or 1; m is 0 or 1; n is 1 or 2. A library of compds. of structure II wherein X is O or S; Q = (CH2)n; A1 is a residue of an .alpha.-amino acid attached through a terminal amino, a peptide residue comprising residues of from 2 to 10 .alpha.-amino acids and attached through a terminal amino, R1 O, R1S, R1, R1NH or R1N-alkyl; A2 is a residue of an .alpha.-amino acid attached through a terminal carboxyl, a peptide residue comprising residues of from 2 to 10 .alpha.-amino acids and attached through a terminal carboxyl, R2SO2, R2NHCO, R2OP(O)(OR6), R2P(O)(OR6) or R2, or A2, A3 and N combine to form a nitrogen heterocycle; A3 is hydrogen when A3 is not combined with A2 and N; A4 is OR4, NHR4, CH2OR4 or CH3; A5 is O, NH or N-alkyl; p, q and r are independently 0 or 1; Y1 and Y2 are independently O or CH2; each of L1 and L2 is independently a difunctional alkyl, aryl, aralkyl, alkanoyl, aroyl or aralkanoyl group; L3 is a single bond, CH2, carbonyl, OP(O)(OR7), NHP(O)(OR7), P(O)(OR7). Thus, solid phase prepn. of Me 4-azido-4-deoxy-3O-benzoyl-2'-O-carboxymethyl-.alpha.-D-fucopyranoside using peptide-bound resins is reported.

MSTR 1

G1 = (1-2) CH2 (SO G2)
G2 = 20

L8 ANSWER 12 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

G3 = O
G4 = 33

G9 = OH
G12 = Ak<EC (1-20) C, BD (0-) D (0-) T>
(SO (1-) aryl<EC (6-20) C, RC (1-4)> (SO))
MPL: claim 1
NTE: substitution is restricted
NTE: additional substitution and ring formation also claimed
NTE: also incorporates claim 55

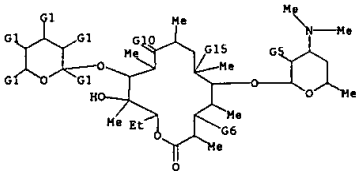
L8 ANSWER 13 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 130:338345 MARPAT
TITLE: Preparation of 11-substituted erythromycin A derivatives
INVENTOR(S): Asaga, Toshifumi; Kashimura, Masato; Morimoto, Shigeo; Kobori, Takeo; Sugimoto, Kikuo; Aida, Kenichi
PATENT ASSIGNEE(S): Taisho Pharmaceutical Co., Ltd., Japan; Sagami Chemical Research Center
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11116590	A2	19990427	JP 1997-280988	19971015

PRIORITY APPLN. INFO.: JP 1997-280988 19971015

AB The derivs. I [X = amino, alkoxy, lower alkyl, arylthio, acyloxy, acyloxymethyl, acylamino, aminomethyl, alkoxycarbonyl, azido, OH, CH2OH; Y = H, (un)substituted tetrahydropyranyl; n = 0-4; R1 = acyloxyimino, :NOH, O; R2 = H, Me; R3 = H, acyl] or their pharmaceutically acceptable salts are prepd. Introduction of tetrahydropyranyl group to 11 position of erythromycin A enhances the bactericidal activity against erythromycin A-susceptible strains. 3-O-.alpha.-cladinosyl-11-O-.alpha.-cladinosyl-5-O-desosaminyl-6-O-methylerythronolide A (prepd. from 4-O-acetyl-1-phenylsulfinylcladinose and 5-O-(2'-O-acetyl)desosaminylerythronolide A 9-acetoxime with 3 steps) inhibited growth of Staphylococcus aureus 209P-JC at MIC 0.39 .mu.g/mL.

MSTR 1



G1 = alkoxy / 59

G4 = acyloxy
G11 = acyloxy
DER: or pharmaceutically acceptable salts

L8 ANSWER 13 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)
MPL: claim 1

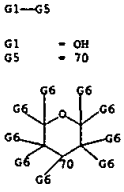
L8 ANSWER 14 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 130:52679 MARPAT
TITLE: Preparation and combinatorial libraries of uronic acids as antibacterial agents
INVENTOR(S): Chan, Tin Yau; Sofia, Michael J.
PATENT ASSIGNEE(S): Intercardia, Inc., USA
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9853813	A1	19981203	WO 1998-US10867	19980528
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9877000	A1	19981230	AU 1998-77000	19980528
EP 998280	A1	20000510	EP 1998-924946	19980528
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002502393	T2	20020122	JP 1999-500897	19980528

PRIORITY APPLN. INFO.: US 1997-47946P 19970529
WO 1998-US10867 19980528

AB Prepn. of library of sugars with a scaffold design that incorporates a carboxylic acid moiety, a free or protected hydroxy group and an amino or protected amino group. Uronic acids I, wherein NP represents amino, protected amino, or amino bound to a solid support; p is 0, 1; X is COOH, COOR1, Me, CH2OR2; Y is CHOR3, NHR4, OR4; Z is O, NH, S; R1 is alkyl, aryl, aralkyl; R2-R6 are independently H, alkyl, aryl, aralkyl, alkanoyl, aralkanoyl, aroyl, hydroxyl protecting group; m is 0, 1; n is 1, 2 were prepd. as bactericides. Thus, uronic acid II was prepd. and tested as bactericide.

MSTR 1



G1 = OH
G5 = 70

G6 = 90 / OH

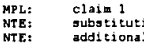
L8 ANSWER 14 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

G10 = OH
G11 = 100

G13 = Ak<(1-20)> (SO)
MPL: claim 1
NTE: substitution is restricted

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 19 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)



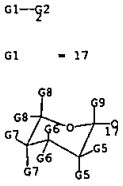
G9 = O
G10 = alkoxy<(1-4)> {SO (1-) G12}
G11 = CH2OMe
DER: and salts
MPL: claim 1
NTE: substitution is restricted
NTE: additional ring formation also specified

L8 ANSWER 20 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 127:136035 MARPAT
TITLE: Glycoconjugates of opioids
INVENTOR(S): Cowie, Diana; Valencia Paera, Gregori
PATENT ASSIGNEE(S): Farmhispania, S.A., Spain; Cowie, Diana; Valencia Parera, Gregori
SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Spanish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9721416	A2	19970619	WO 1996-ES214	19961115
WO 9721416	A3	19970912		
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2211596	AA	19970619	CA 1996-2211596	19961115
EP 816375	A1	19980107	EP 1996-938222	19961115
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 10513485	T2	19981222	JP 1996-521758	19961115
PRIORITY APPLN. INFO.:			ES 1995-2346	19951129
			WO 1996-ES214	19961115

AB Glycoconjugates of biol. active opioids were prepd. which have at least one residue of carbohydrate linked to the opioid via an O- or C-glycoside bond. Thus, 6-morphinyl-.beta.-D-glucopyranoside acetate was prepd. by reaction of tetra-acetyl-.alpha.-D-glucopyranosyl bromide with 3-O-acetylmorphine, followed by sapon. with MeONa-MeOH.

MSTR 1



G1 = 17

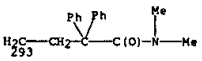
G5 = 31

G6 = 33

L8 ANSWER 20 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

G7 = 35

G9 = CH2OH
G33 = 293



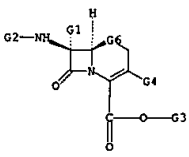
MPL: claim 4
NTE: also incorporates claims 23, 24, 50, 66, and structures VIII a-i, IX a-e, X a-e, XI a-e

L8 ANSWER 21 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 125:114393 MARPAT
TITLE: Process for the preparation of cephalosporins and analogs
INVENTOR(S): Burton, George; Naylor, Antoinette
PATENT ASSIGNEE(S): Pfizer Inc., USA
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

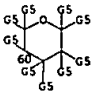
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9617847	A1	19960613	WO 1995-GB2783	19951129
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRIORITY APPLN. INFO.:			GB 1994-24847	19941209

OTHER SOURCE(S): CASREACT 125:114393
AB Cephalosporins I (X = S, SO, SO2, O, CH2; R1 = H, OMe, NHCHO; R2 = acyl; R3 = in vivo hydrolizable ester group; R4 = (un)substituted tetrahydrofuryl, tetrahydropyranyl] are prepd. by reaction of the corresponding carboxylic acid with R3Y [Y = halide] in the presence of an aq. phase contg. a base and a phase transfer catalyst. Subsequent removal of protecting groups, conversion of groups X and R2 and salt formation may be carried out. Thus, 4-methoxybenzyl (6R,7R)-7-phenylacetamido-3-[(S)-2-tetrahydrofuryl]cephem-4-carboxylate was treated with Me3CCO2CH2I, followed by deacylation and reacylation to give pivaloyloxymethyl (6R,7R)-7-[2-(2-amino-4-thiazolyl)-2-(Z)-methoxyiminoacetamido]-3-[(S)-2-tetrahydrofuryl]cephem-4-carboxylate.

MSTR 1



G2 = acyl
G4 = 60



G5 = alkoxy<(1-6)> / alkyl<(1-6)> (SR alkoxy<(1-6)>)

L8 ANSWER 21 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)
MPL: claim 1

L8 ANSWER 22 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 124:343981 MARPAT
TITLE: Synthesis of glycopyranosides as antitumors
INVENTOR(S): Billington, David; Dorey, Gilbert; Leon, Pascale; Atassi, Ghanem; Pierre, Alain; Burbridge, Michael; Guilbaud, Nicolas
PATENT ASSIGNEE(S): Adir Et Compagnie, Fr.
SOURCE: Eur. Pat. Appl., 48 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 699679	A1	19960306	EP 1995-401971	19950830
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
FR 2723947	A1	19960301	FR 1994-10462	19940831
FR 2723947	B1	19960927		
FI 9504026	A	19960301	FI 1995-4026	19950828
CA 2157156	AA	19960301	CA 1995-2157156	19950829
AU 9530345	A1	19960314	AU 1995-30345	19950829
AU 689290	B2	19980326		
NO 9503400	A	19960301	NO 1995-3400	19950830
JP 08073484	A2	19960319	JP 1995-221904	19950830
CN 1127757	A	19960731	CN 1995-116910	19950830
US 5595976	A	19970121	US 1995-521189	19950830
ZA 9507322	A	19960409	ZA 1995-7322	19950831

PRIORITY APPLN. INFO.: FR 1994-10462 19940831
AB Title glycopyranosides, e.g. I (R = alkyl; R1 = alkyl, alkoxy; R2,R3 = H, alkyl, alkoxy; R4 = H, alkyl; R5,R6 = H , OH, heterocycle, amide), were prepd. as antitumors. Thus, glycoside II was prepd. and tested for its antitumor and cytotoxic activities.

MSTR 1

G1 = 7

G2 = OH
G5 = OH
G6 = 30

L8 ANSWER 22 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

G9 = 49

G11 = 115

G16 = OH
G18 = 79

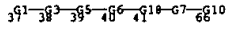
G19 = OH
G24 = Ak<EC (1-6) C, BD (0-) D (0-) T>
DER: and pharmaceutically acceptable acid addition salts
MPL: claim 1
STE: and optical and geometric isomers

L8 ANSWER 23 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 124:9455 MARPAT
TITLE: Preparation of carbohydrate-containing peptides which bind to carbohydrate binding receptors.
INVENTOR(S): Meldal, Morten; Christensen, Mette Knak; Rozarth, Henriette Cordes
PATENT ASSIGNEE(S): Carlsberg A/S, Den.; Mouritsen and Elsner A/S
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9514036	A1	19950526	WO 1994-DK432	19941116
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ				
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9510632	A1	19950606	AU 1995-10632	19941116

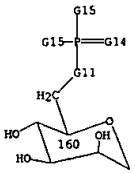
PRIORITY APPLN. INFO.: DK 1993-1292 19931116
WO 1994-DK432 19941116
AB A1-A2(R1)-(A3)m-A4(R2)-(A5)n-A6(R3)-A7 [R1-R3 = (chem. modified) D- or L-Glc, -Man, -Gal, -Fuc, GlcNAc, GalNAc, Fru, Neu5Ac or oligosaccharides thereof; A1, A7 = H, OH, NH2, residues of D- or L-amino acids, peptides, glycopeptides, peptidomimetics, oligonucleotides; A2, A4, A6 = residues of D- or L-hydroxyamino acids, e.g. Ser, Thr, Tyr, or -carboxamidoamino acids, e.g. Asn, Gln; A3, A5 = residues of genetically encoded or non-encoded D- or L-amino acids, peptidomimetics, nucleotides; m, n = 1-15; any residue in the sequence A1-A7 may be covalently linked to form a cyclic deriv], were prepd. Thus, Ac-Thr(Q)-Lys(Y)-Thr(Q)-NH2 (Q = P-6-D-Man-.alpha.-(1,2)-D-Man, Y = anthranilate), prepd. by multiple column peptide synthesis on derivatized PEGA resin, showed a strong specific inhibition of the interaction between cation-independent mannose 6-phosphate receptor and solid phase bound mannose 6-phosphate.

MSTR 1

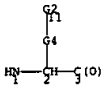


G2 = 160

L8 ANSWER 23 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)



G3 = 1-37 3-39



G4 = 26-2 27-11

G11 = O
DER: or pseudopeptide derivatives
MPL: claim 1
NTE: additional ring formation specified
STE: 247,258,270,281 - .alpha.-D-MANNO
STE: 2,46,68,75,81,88 - D,L

L8 ANSWER 24 OF 41 MARPAT COPYRIGHT 2003 ACS

ACCESSION NUMBER: 124:9449 MARPAT
TITLE: Selective asymmetric hydrogenation of dehydroamino acid derivatives to .alpha.-amino acids using rhodium and iridium diphosphinite carbohydrate catalyst compositions
INVENTOR(S): Ayers, Timothy Allen; Rajanbabu, Thaliyil V.
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

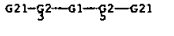
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9518787	A1	19950713	WO 1995-US10	19950110
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5481006	A	19960102	US 1994-179859	19940111
CA 2178720	AA	19950713	CA 1995-2178720	19950110
EP 739333	A1	19961030	EP 1995-906739	19950110
EP 739333	B1	19981014		
R: DE, FR, GB, IT				
JP 09507789	T2	19970812	JP 1995-518536	19950110
US 5510507	A	19960423	US 1995-427327	19950424

PRIORITY APPLN. INFO.: US 1994-179859 19940111
WO 1995-US10 19950110
OTHER SOURCE(S): CASREACT 124:9449

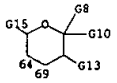
AB A process and catalyst compn. are provided for the highly efficient enantioselective hydrogenation of dehydroamino acid derivs. ZZ1C:C(CO2Z2)NHZ3 (Z - Z3 = H, C1-40 carboalkoxy, arom. or nonarom. hydrocarbyl, or arom. or nonarom. heterocyclyl each optionally substituted with .gtoreq. halo, alkoxy, carboalkoxy, NO2, haloalkyl, OH, NH2, keto, or S-contg. group) with a source of H to the corresponding chiral .alpha.-amino acids ZZ1CHCH(CO2Z2)NHZ3 (Z - Z3 = same as above) in the presence of a catalyst compn. The catalyst compn. comprises rhodium or iridium and a diphosphinite carbohydrate ligand (R1)2-P-X-R2-X-P(R1)2 [R2 = C4-40 dideoxycarbohydrate; X = O, NR3; wherein R3 = H, C1-20 alkyl or aryl; R1 = (un)substituted arom. hydrocarbyl], wherein the phosphorous atoms are attached to arom. groups substituted with electron-donating substituents. Also provided is a means to selectively produce .alpha.-amino acids in either the L or the D form, based upon use of a sugar in the ligand with phosphinites attached in an abs. Right-Left or Left-Right configuration, resp. Thus, a 150 mL Fisher-Porter tube was charged with 50 mg PhCH:C(CO2H)NHAc, 1 mg a Rh-glucopyranoside diphosphinite deriv. (I; R1 = 3,5-dimethylphenyl) complex, i.e. I.Rh(COD)SbF6 (COD = cyclooctadiene), and 1 mL THF. The tube was sealed and charged with H (40 psi) for 3 h to give (S)-PhCH2CH(CO2H)NHAc of 99% e.e. Similarly, (R)-PhCH2CH(CO2H)NHAc of 97.0% e.e. was obtained by using a Rh-glucopyranoside diphosphinite deriv. (II; R1 = 3,5-dimethylphenyl) complex, i.e. II.Rh(COD)SbF6.

MSTR 2

L8 ANSWER 24 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)



G1 = 69-3 64-5



G2 = O
G8 = alkoxy
G10 = CH2OH
G13 = OH
G14 = acyl
MPL: claim 1

L8 ANSWER 25 OF 41 MARPAT COPYRIGHT 2003 ACS

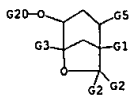
ACCESSION NUMBER: 123:220829 MARPAT
TITLE: Herbicidal bicyclic ethers.
INVENTOR(S): Rendina, Alan R.; Taylor, Wendy S.
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours and Co., USA
SOURCE: U.S., 49 pp. Cont.-in-part of U.S. Ser. No. 648,001, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5405830	A	19950411	US 1993-94130	19930729
WO 9213861	A1	19920820	WO 1992-US31	19920109
W: BR, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
BR 9205717	A	19940517	BR 1992-5717	19920109
JP 06505249	T2	19940616	JP 1992-505285	19920109

PRIORITY APPLN. INFO.: US 1991-648001 19910130
WO 1992-US31 19920109

AB The bicyclic ethers I(R1=alkyl;R2=H,alkyl,alkenyl, alkynyl;R3,R4=R2,methoxyalkyl,ethoxyalkyl;X=CH2Br,CH2CN,CH2CH:CH2,CH2SMe, etc.;Q=2-pyridylmethyl,2-BrC6H4CH2,etc.) are prepd. as herbicides. 2-Endo-4-endo-{.+-.)-[5-methyl-4-(penylmethoxy)]-2-(2-propenyl)-6-oxabicyclo[3.2.1]octane is an example.

MSTR 1



G7 = 96

G8 = 17

G13 = alkyl<(1-6)> (SO)
G14 = O

L8 ANSWER 28 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 122:31834 MARPAT
TITLE: Preparation of 1-O-3-methylthiopropionyl-pyranose and -furanose sugar derivatives as glycosyl donors and method for preparation of glycosides using the glycosyl donors
INVENTOR(S): Inazu, Toshuki; Nakamura, Kazumi
PATENT ASSIGNEE(S): Noguchi Kenkyusho, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

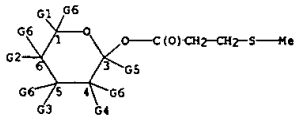
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06263785	A2	19940920	JP 1993-77582	19930311

PRIORITY APPLN. INFO.: JP 1993-77582 19930311
OTHER SOURCE(S): CASREACT 122:31834

AB The title glycosyl donors (I and II; R = H, Me, CH2OH, OH, OCH2Ph, OAc, OMe, CH2OMe, CH2OCPh3, CH2OCH2Ph, CH2OAc, NHAc, Q, or Q1; or 2 R are bonded together to form OCMe2O or OCHPhO) are prepd. by reaction of the anomeric OH group of pyranose or furanose sugars with 3-methylthiopropionyl chloride in the presence of a base. The sugar derivs. I and II are reacted with an alc. selected from an aliph., arom., steroid alcs., glycerol derivs., sugar derivs., and amino acid derivs. in the presence of an activating agent selected from perchloric acid or trifluoromethanesulfonic acid salts. The latter salts are preferably trityl perchlorate and tin(II) trifluoromethanesulfonate. The above glycosidation is also carried out in the copresence of iodine with trityl perchlorate or lithium perchlorate with tin(II) trifluoromethanesulfonate. These glycosyl donors are stable and efficiently undergo glycosidation in good yields and are useful for prepg. glycosides of pharmaceutical and agrochem. interest such as antibiotics and anticancer agents and glycosides related to cell adhesion and differentiation. Thus, 1.013 g 2,3,4,6-tetra-O-benzyl-D-glucopyranose was dissolved in THF followed by adding 1.26 mL 1.68 M BuLi soln. at -40.degree. and after stirring at the same temp. for 30 min, 286 mg 3-methylthiopropionyl chloride in THF was added and the resulting mixt. was stirred at -40.degree. for 5 h to give 1-O-3-methylthiopropionyl-D-glucopyranose (III; R1 = 3-methylthiopropionyl; Bn = CH2Ph) in .alpha.-anomer 60% and .beta.-anomer 29% yield. The latter .beta.-anomer (50 mg) was dissolved in 1 mL Et2O followed adding 778 .mu.L 0.1 M iodine soln. in Et2O at room temp., stirring the resulting mixt. for 1 h, and evapg. the solvent. The residue was redissolved in 1 mL Et2O and 15 mg trityl perchlorate and 31 mg 3.beta.-cholestanol were added by using 1 mL Et2O at 0.degree. followed by stirring the resulting mixt. with raising the temp. to room temp. overnight and treating the reaction mixt. with 5% aq. Na2S2O3 to give, after purifn. by silica gel TLC, 87% glycoside III (R1 = 3.beta.-cholestanyl) in .alpha.:.beta. anomeric ratio of 8.4:1. In another example, glycosidation of the .alpha.-anomer III (R1 = 3-methylthiopropionyl) with Me 2,3,4-tri-O-benzyl-.alpha.-D-glucopyranoside in the presence of trityl perchlorate in Et2O gave 71% disaccharide III (R1 = Q2) in .alpha.:.beta. anomeric ratio of 8.7:1.

NSTR 1

L8 ANSWER 28 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)



G2 = OH
G3 = OH
G4 = OH
G5 = CH2OH
MPL: claim 1

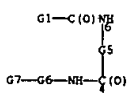
L8 ANSWER 29 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 121:292774 MARPAT
TITLE: Biologically active bistramides, process for their production, and their cytostatic applications in therapy, especially against tumors or parasites
INVENTOR(S): Biard, Jean Francois; Cortadellas, Dominique; Debitus, Cecile; Laurent, Dominique; Roussakis, Cristos; Verbist, Jean Francois
PATENT ASSIGNEE(S): Institut Francais de Recherche Scientifique pour Le Developpment Cooperation, Fr.
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9420503	A1	19940915	WO 1994-FR256	19940308
W: AU, BR, CA, JP, NZ, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2702478	A1	19940916	FR 1993-2662	19930308
FR 2702478	B1	19950505		
FR 2707644	A1	19950120	FR 1993-7925	19930629
FR 2707644	B1	19950929		
CA 2157760	AA	19940915	CA 1994-2157760	19940308
AU 9462108	A1	19940926	AU 1994-62108	19940308
AU 679501	B2	19970703		
EP 688323	A1	19951227	EP 1994-909165	19940308
R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, SE				
US 5798381	A	19980825	US 1996-513923	19960304

PRIORITY APPLN. INFO.: FR 1993-2662 19930308
FR 1993-7925 19930629
WO 1994-FR256 19940308

AB Bistramide derivs. (Markush included) (excluding A, B and C bistramides) with virtually no toxic effects are disclosed. The bistramides are useful esp. as drugs having a cytostatic effect, in particular as antitumor or anti-parasitic drugs. Isolation of bistramides D, K, and L from Lissoclinum bistratum, prepn. of bistramide D by redn. of bistramide A, characterization of the bistramides, are described. Activity of bistramides D, K, and L against a variety of tumor cell lines was detd. Anti-parasitic activity against Plasmodium vinckei petteri is also presented. An injection formulation of bistramide D is included.

NSTR 1



G3 = OH / 11

L8 ANSWER 29 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

G4 = alkoxy<(1-4)>
G5 = Ak<(1-20)> (SR (1-) G3)
MPL: claim 1
NTE: substitution is restricted

L8 ANSWER 30 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 121:180109 MARPAT
TITLE: Preparation of cyclic chiral compounds
INVENTOR(S): Cadogan, John Ivan George; Hodgson, Philip Kenneth Gordon; Gosney, Ian; Banks, Malcolm Robert
PATENT ASSIGNEE(S): British Petroleum Co. PLC, UK
SOURCE: Brit. UK Pat. Appl., 31 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2261435	A1	19930519	GB 1992-23783	19921113
PRIORITY APPLN. INFO.:			GB 1991-24204	19911114

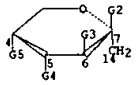
OTHER SOURCE(S): CASREACT 121:180109

AB Optically active cyclic compds. [I; R1, R2, R3, R4 = H, (CO)xR5 (in which x = 0 or 1 and R5 = alkyl, aryl, cycloalkyl, alkaryl or aralkyl), or R1 and R2 together and/or R3 and R4 together represent a divalent hydrocarbyl group; Q = O or S; Y = H, an alkali metal atom or alk. earth metal atom or a group of the general formula COA (in which A = halo, NHOH, or the residue of an amine, amino acid, alc. or thiol formed by removal of a hydrogen atom from a NH, OH or SH group, or A = alkyl, alkenyl, cycloalkenyl or alkoxy, each optionally substituted by an aryl, cycloalkyl, hydroxy, halo, alkoxy or acyl); n = 0 when m = 1 and n = 1 when m = 0], useful in asym. synthesis (serving as chiral auxiliary groups) and in the sepn. of optically active isomers, are prepd. by ring closure of compds. of the general formula [II; n, m, R1, R2, R3 and R4 are as previously defined; Z = N3 or a group of the general formula NHOSO2R6 (in which R6 = aryl)]. Thus, 28 g 2,3:4,5-di-O-isopropylidene-.beta.-D-fructopyranoside was reacted with COCl2 in pyridine, Et2O, and toluene at 0.degree. to room temp. to give 100% chloroformyl ester (III; R = COCl) which (34.7 g) was vigorously stirred with 14.1 g NaN3 in the presence of Bu4NBr in H2O and CH2Cl2 for 4 h to give 95% azidoformyl ester III (R = CON3). A soln. of the azidoformyl ester (33.6 g) in tetrachloroethane was heated under reflux for 4 h to give 51% 5-aza-3,10-dioxa[4.4.01.6]decan-4-one deriv. (IV; R5 = H) which (6 g) in THF was added to a prepd. soln. of Mg turnings and bromoethane in Et2O at 0.degree., stirred at 0.degree. for 15 min, and cooled to -78.degree. followed by adding a soln. of 2.6 g propionyl chloride in THF, warming to room temp., and stirring overnight to give 97% IV (R5 = propionyl). A soln. of the latter compd. (1.0 g) in THF was added to a prepd. mixt. of BuLi and (Me2CH)2NH in THF at -78.degree. with stirring and after stirring for 30 min, freshly distd. isobutyraldehyde (0.33 g) in THF was added followed by stirring for 30 min to give 95% IV (R5 = 2,4-dimethyl-3-hydroxypentanoyl) as a 9:1 mixt. of diastereoisomers which was treated with H2O2 in aq. THF at 0.degree. followed by addn. of LiOH.H2O, stirring the resulting mixt. for 1 h at 0.degree., and quenching the reaction with Na2SO3 soln. to give (2S,3R)-2,4-dimethyl-3-hydroxypentanoic acid.

MSTR 2

L8 ANSWER 30 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

G1 = 14



G2 = 33

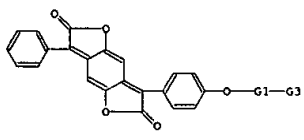
G3 = OH
G4 = OH
G5 = OH
G6 = C(O)
G7 = alkyl (SO (1-) aryl)
MPL: claim 1

L8 ANSWER 31 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 121:159334 MARPAT
TITLE: Compositions containing anthraquinone and benzodifurandione dyes and dyeing of hydrophobic materials using them.
INVENTOR(S): Fukui, Toshinori; Katsuda, Nobuyuki; Yabushita, Shinichi; Hashizume, Shuhei
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

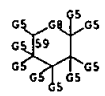
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 603803	A1	19940629	EP 1993-120546	19931220
EP 603803	B1	19980506		
R: BE, CH, DE, ES, FR, GB, IT, LI				
JP 06184458	A2	19940705	JP 1992-342047	19921222
JP 3170917	B2	20010528		
US 5547478	A	19960820	US 1993-167019	19931216
PRIORITY APPLN. INFO.:			JP 1992-342047	19921222

AB The dye mixts. comprise .gtoreq.1 benzodifurandione I [Q = 5- or 6-membered heterocyclic residue; Z = CH2, C2-6 alkylene optionally substituted by OH, C1-4 alkoxy, or (C1-4 alkyl)carbonyloxy] and .gtoreq.1 anthraquinone II [R = (un)substituted C1-6 alkyl, (un)substituted Ph, (C1-4 alkoxy)phenylsulfonyl], and hydrophobic materials dyed with them give red products with excellent pH dependency and fastness to light and washing. Polyester fibers were thus dyed uniformly with a bath contg. 9 parts I (ZQ = tetrahydrofurfuryl) and 1 part II (R = Ph).

MSTR 1



G1 = CH2
G3 = 59



G5 = OH / alkylcarbonyl<(1-4)>
G8 = O
MPL: claim 1

L8 ANSWER 31 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

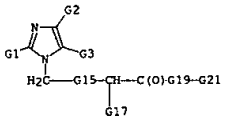
L8 ANSWER 32 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 120:107011 MARPAT
TITLE: Preparation of [(carbamoylmethyl)benzyl]imidazoles as angiotensin II antagonists
INVENTOR(S): Mueller, Ulrich; Mueller-Gliemann, Matthias; Dressel, Juergen; Fey, Peter; Hanko, Rudolf; Huebsch, Walter; Kraemer, Thomas; Niewoehner, Ulrich; Beuck, Martin; et al.
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Eur. Pat. Appl., 34 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 560162	A1	19930915	EP 1993-103217	19930301
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
DE 4208052	A1	19930916	DE 1992-4208052	19920313
NO 9300722	A	19930914	NO 1993-722	19930226
US 5420149	A	19950530	US 1993-25493	19930303
AU 9334027	A1	19930916	AU 1993-34027	19930305
CA 2091435	AA	19930914	CA 1993-2091435	19930310
ZA 9301772	A	19930929	ZA 1993-1772	19930312
HU 64039	A2	19931129	HU 1993-720	19930312
JP 06056795	A2	19940301	JP 1993-78700	19930312
CN 1076444	A	19930922	CN 1993-102259	19930313

PRIORITY APPLN. INFO.: DE 1992-4208052 19920313

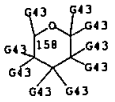
AB Title compds. [I; A = alkyl, alkenyl, cycloalkyl; B = H, halo, perfluoroalkyl; D = CH2OR3, COR4, CONR5R6, etc.; R3 = H, alkyl; R4 = H, OH, alkoxy; R5, R6 = H, alkyl, etc.; E = H, halo, NO2, OH, CF3, OCF3, alkyl, alkoxy, alkoxycarbonyl, cyano, carboxy; L = (substituted) alkyl; R1 = H, alkyl; R2 = CMe2CH2OH, etc.], were prepd. Thus, 4-MeC6H4CH2CO2CMe3 (prepn. given) was alkylated with cyclopentyl bromide using KOCMe3 in DMF to give 97.5% tert-Bu 2-cyclopentyl-2-(4-methylphenyl)acetate. This was refluxed with N-bromosuccinimide and azobisisobutyronitrile in CCl4 to give 57% tert-Bu 2-(4-bromomethylphenyl)-2-cyclopentylacetate. Condensation of the latter with 2-butyl-5-formyl-4-chloroimidazole using NaH in DMF gave 66.7% benzylimidazole deriv., which was deesterified with CF3CO2H in CH2Cl2 (87.6%) followed by amidation with 3-amino-3-phenyl-1-propanol using Et3N/MeSO2Cl/DMAP in THF to give title compd. II. I reduce arterial blood pressure in rats at clin. relevant doses.

MSTR 1



L8 ANSWER 32 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

G22 = CH2
G24 = alkyl<(2-8)> (SO (-3) G25)
G25 = OH / CO2H / 158



G43 = OH
DER: and salts
MPL: claim 1

L8 ANSWER 33 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 118:191726 MARPAT
TITLE: Preparation oxazole and thiazole derivatives as active oxygen inhibitors
INVENTOR(S): Chihiro, Masatoshi; Komatsu, Hajime; Tominaga, Michiaki; Yabuuchi, Youichi
PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 560 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9209586	A1	19920611	WO 1991-JP1659	19911129
W: AU, CA, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
CA 2074933	AA	19920531	CA 1991-2074933	19911129
AU 9189367	A1	19920625	AU 1991-89367	19911129
AU 656930	B2	19950223		
EP 513387	A1	19921119	EP 1991-920815	19911129
EP 513387	B1	20000301		
R: CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
JP 05051318	A2	19930302	JP 1991-342495	19911129
EP 934937	A1	19990811	EP 1999-107493	19911129
EP 934937	B1	20020227		
R: CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
ES 2144403	T3	20000616	ES 1991-920815	19911129
EP 1130017	A2	20010905	EP 2001-112988	19911129
EP 1130017	A3	20010919		
R: CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
ES 2173683	T3	20021016	ES 1999-107493	19911129
US 5643932	A	19970701	US 1995-444728	19950519
US 5677319	A	19971014	US 1995-482657	19950607
US 6080764	A	20000627	US 1997-826343	19970325
JP 10101562	A2	19980421	JP 1997-233370	19970813
JP 3182556	B2	20010703		
US 37556	E	20020219	US 1999-245914	19990208

PRIORITY APPLN. INFO.: JP 1990-337727 19901130
EP 1991-920815 19911129
EP 1999-107493 19911129
JP 1991-342495 19911129
WO 1991-JP1659 19911129
US 1992-916082 19920729
US 1995-444728 19950519
US 1995-482657 19950607

AB The title compds. [I; R1 = (substituted) Ph; R2 = H, halo, alkyl, Ph alkoxycarbonyl, alkylamino, etc.; R3 = Q (wherein R = OH, CO2H, alkyl, alkenyl; m = 0-2); X = S, O], useful in treating thrombosis, arteriosclerosis, peptic ulcers, etc., are prepd. A suspension of 367 mg II and 430 mg 3,4-(MeO)2C6H3CSNH2 in EtOH was refluxed to give 160 mg thiazole salt III, which showed IC50 of 1 .mu.M against superoxide formation. I were also effective in treating arrhythmia, ischemic renal disorders, and myocardial necrosis.

MSTR 28

L8 ANSWER 33 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

G4 = 352

G17 = 2-tetrahydropyranyl (SO (1-4) G18)
G18 = OH / loweralkyl (SR loweralkylcarbonyloxy) / loweralkylcarbonyloxy
DER: and salts
MPL: claim 2
NTE: substitution is restricted

L8 ANSWER 34 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 118:148719 MARPAT
TITLE: Migration-resistant plasticizers in biodegradable starch-thermoplastic polymer compositions
INVENTOR(S): Bastioli, Catia; Bellotti, Vittorio; Montino, Alessandro
PATENT ASSIGNEE(S): Novamont S.p.A., Italy
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9214782	A1	19920903	WO 1992-EP320	19920214
W: AU, BR, CA, CS, FI, HU, JP, KR, NO, PL, SU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
AU 9212226	A1	19920915	AU 1992-12226	19920214
AU 664168	B2	19951109		
EP 575349	A1	19931229	EP 1992-904038	19920214
EP 575349	B1	19980617		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE				
BR 9205651	A	19940607	BR 1992-5651	19920214
JP 06507924	T2	19940908	JP 1992-503985	19920214
HU 68412	A2	19950628	HU 1993-2378	19920214
HU 219571	B	20010528		
PL 170436	B1	19961231	PL 1992-300352	19920214
RU 2086580	C1	19970810	RU 1993-52398	19920214
AT 167503	E	19980715	AT 1992-904038	19920214
ES 2117044	T3	19980801	ES 1992-904038	19920214
CZ 284842	B6	19990317	CZ 1993-1712	19920214
ZA 9201196	A	19921125	ZA 1992-1196	19920219
CN 1066859	A	19921209	CN 1992-101580	19920219
CN 1043777	B	19990623		
IL 101017	A1	19960618	IL 1992-101017	19920219
US 5292782	A	19940308	US 1992-996880	19921228
NO 9302948	A	19930819	NO 1993-2948	19930819
PRIORITY APPLN. INFO.:			IT 1991-TO118	19910220
			WO 1992-EP320	19920214
			US 1992-839322	19920220

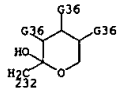
AB The title compns. are mixts. of starch, a thermoplastic polymer, and a plasticizer such as polyols, e.g., polyglycerol, PVA, etc., and their (thio)ether, (in)org. ester, acetal or amino derivs., and oxidn. products and specified derivs. Thus, plastic plates were prepd. by injection molding a melt-homogenized and granulated mixt. of Globe 3401 starch (11% H2O) 37, ethylene-vinyl alc. copolymer (42% ethylene, 99.5% hydrolyzed) 37, 80:20 ethylene-acrylic acid copolymer (melt flow 2 at 125.degree. and 0.325 kg) 3, Armid E 0.3, urea 5, polyglycerol 15, and H2O 2.7 parts. The plates showed neither bleeding nor loss of plasticizer after being exposed over 6 h to an artificial weathering cycle program, whereas similar plates made of the above compn. in which the polyglycerol was replaced by a glycerol (av. glycerol content 4) became oily.

MSTR 5

L8 ANSWER 34 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

G10–G35

G10 = alkylcarbonyloxy<EC (2-18) C, DC (0) M3>
G35 = 232



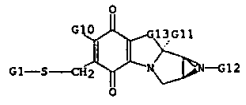
G36 = OH
DER: and salts
MPL: claim 8

L8 ANSWER 35 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 117:150800 MARPAT
TITLE: Mitomycin derivatives, methods for their preparation and their activity as neoplasm inhibitors and bactericides
INVENTOR(S): Arai, Hitoshi; Kono, Motomichi; Kasai, Masaji; Gomi, Katsushige; Ashizawa, Tadashi
PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 25 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 485904	A1	19920520	EP 1991-119074	19911108
EP 485904	B1	19970820		
R: DE, FR, GB, IT				
JP 05025176	A2	19930202	JP 1991-288676	19911105
US 5180825	A	19930119	US 1991-791188	19911113
PRIORITY APPLN. INFO.:			JP 1990-306663	19901113

OTHER SOURCE(S): CASREACT 117:150800
AB Mitomycin derivs. are claimed. Pharmaceuticals with antitumor and/or antibacterial activity contg. such mitomycin derivs. are claimed. Treatment of 1a-acetyl-7-demethoxy-6-demethyl-6,7-dihydro-7-ethylenedioxy-6-methylenemitomycin A with 2-mercaptopyridine gave the corresponding 6-[(2-pyridylthio)methyl]mitomycin A which was deprotected to give 6-demethyl-6-[(2-pyridylthio)methyl]mitomycin C (I). I inhibited the growth of HeLa S3 cells (IC50 = 1.8 .mu.M).

MSTR 18



G1 = 83

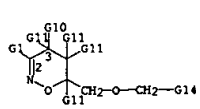
G8 = OH / alkylcarbonyloxy<(1-5)> / CH2OH
MPL: claim 1

L8 ANSWER 36 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 117:131232 MARPAT
TITLE: 6-alkoxy-3-(1,1-dimethylethyl)-5,6-dihydro-4H-oxazine derivatives, a method for their preparation and their use as herbicides
INVENTOR(S): Patel, Kanu Maganbhai; Stevenson, Thomas Martin
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: PCT Int. Appl., 112 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9209587	A1	19920611	WO 1991-US8243	19911113
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
AU 9190542	A1	19920625	AU 1991-90542	19911113
EP 559742	A1	19930915	EP 1992-900425	19911113
R: DE, ES, FR, GB, IT				
PRIORITY APPLN. INFO.:			US 1990-618146	19901126
			WO 1991-US8243	19911113

OTHER SOURCE(S): CASREACT 117:131232
AB Certain oxazine compds., e.g., 6-alkoxy- or 6-(benzyloxy)-3-(1,1-dimethylethyl)-5,6-dihydro-4H-oxazine derivs., and their use as herbicides are claimed. Cyclocondensation of 1-bromo-3,3-dimethyl-2-butanone oxime with methallyl alc. (CH2Cl2/Na2CO3) gave 3-(1,1-dimethylethyl)-5,6-dihydro-6-methyl-4H-oxazine-6-methanol. The latter was benzylated with 2-fluorobenzyl bromide to give 3-(1,1-dimethylethyl)-6-[[(2-fluorophenyl]methoxy]methyl]-5,6-dihydro-6-methyl-4H-oxazine (I). I had herbicidal activity against a broad spectrum of species tested.

MSTR 18



G4 = CHMe
G6 = 21

G14 = 2-tetrahydropyranyl (SO (1-2) G18)
G18 = OMe
MPL: claim 1

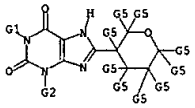
L8 ANSWER 37 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 117:26198 MARPAT
TITLE: Preparation of [(poly)cyclic (oxa)alkyl]xanthines and analogs as adenosine antagonists
INVENTOR(S): Kuefner-Muehl, Ulrike; Stransky, Werner; Walther, Gerhard; Weber, Karl Heinz; Ensinger, Helmut; Kuhn, Franz Josef; Schingnitz, Guenter; Lehr, Erich
PATENT ASSIGNEE(S): Boehringer Ingelheim K.-G., Germany
SOURCE: Ger. Offen., 28 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4019892	A1	19920102	DE 1990-4019892	19900622
CA 2064742	AA	19911223	CA 1991-2064742	19910619
WO 9200297	A1	19920109	WO 1991-EP1131	19910619
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
EP 487673	A1	19920603	EP 1991-910772	19910619
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 05501265	T2	19930311	JP 1991-510343	19910619
US 5641784	A	19970624	US 1994-362105	19941222
			DE 1990-4019892	19900622
			WO 1991-EP1131	19910619
			US 1992-834550	19920320
			US 1993-168280	19931215

PRIORITY APPLN. INFO.:

AB Title compds. [I; R1, R2 = alkyl, alkenyl, alkynyl; R3 = N-attached heterocyclyl, monosaccharide, cycloalkanone ketal; (poly)cyclic (oxa)alkyl, etc.] were prepd. as adenosine antagonists (no data). Thus, 7-carboxyspiro[cis-bicyclo[3.3.0]octane-3,2'-(1,3-dithiolane)] (prepn. given) was cyclocondensed with 5,6-diamino-1,3-dipropyluracil and the product hydrolyzed to give title compd. II.

MSTR 1D



G5 = OH / alkylcarbonyloxy<(1-13)> / CH2OH
DER: and pharmacologically acceptable acid addition salts
MPL: claim 1
STE: and racemates, optically active compounds, diastereomers and mixtures

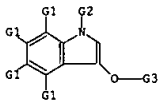
L8 ANSWER 38 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 117:3817 MARPAT
TITLE: Substance determination using hydrogen peroxide produced during enzymic indigo formation
INVENTOR(S): Tsuji, Akio; Maeda, Masako; Arakawa, Hidetoshi
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 476930	A1	19920325	EP 1991-308338	19910912
EP 476930	B1	19971112		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
CA 2051144	AA	19920313	CA 1991-2051144	19910911
JP 04356200	A2	19921209	JP 1991-232999	19910912
AT 160177	E	19971115	AT 1991-308338	19910912
ES 2110979	T3	19980301	ES 1991-308338	19910912
			JP 1990-240018	19900912

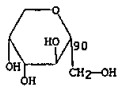
PRIORITY APPLN. INFO.:

AB A sensitive method for detn. of a substance comprises measuring the H2O2 producing during enzymic prodn. of indigo from an 3-O-indoxyl ester. An immunoassay for .alpha.-fetoprotein according to this method utilized anti-.alpha.-fetoprotein antibody-coated tubes and alk. phosphatase-anti-.alpha.-fetoprotein antibody conjugates. Chemiluminescence detection of the sample followed addn. of the indoxyl ester 5-bromo-4-chloro-3-indolyl phosphate, the luminescence reagent 2-cyclohexylaminoethane sulfonic acid, luminol, and microperoxidase. Levels as low as 1 ng .alpha.-fetoprotein/mL could be measured with good sensitivity by this technique.

MSTR 1



G2 = acyl
G3 = 90



L8 ANSWER 38 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)
MPL: claim 20
NTE: fragment 24 represents galacto-, gluco-, and mannopyranose residues

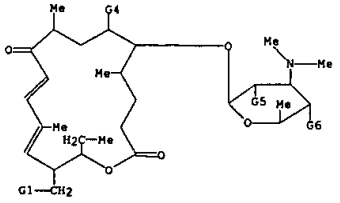
L8 ANSWER 39 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 116:84105 MARPAT
TITLE: Preparation of 3-deoxytylosin derivatives
INVENTOR(S): Umezawa, Sumio; Tsuchiya, Osamu; Takeuchi, Tomio; Kageyama, Toshiharu; Miyake, Toshiaki
PATENT ASSIGNEE(S): Microbiochemical Research Foundation, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03184991	A2	19910812	JP 1989-322890	19891212
			JP 1989-322890	19891212

PRIORITY APPLN. INFO.:

AB The title compds. [I; R1 = H, OH, HOCH2, alkyl, alkoxy, (alkoxy)(halo)tetrahydrofuryl, -tetrahydropyranyl; R2 = Me, CHO; R3 = H, acyl; R4 = H, OH] and their salts, useful as antibacterials (no data), were prepd. Desmycosin was cyclocondensed with ethyleneglycol, the resulting bis(ethylene acetal) dehydrated, the resulting 2-dehydro-2-ene-3-deoxydesmycosin 9,20-bis(ethylene acetal) was reduced with NaBH4 in MeOH contg. NiCl2.6H2O at -20.degree. to give 73% 3-deoxydesmycosin 9,20-bis(ethylene acetal).

MSTR 1



G1 = 26

G2 = 2-tetrahydropyranyl (SO (1-) G3)
G3 = OH / CH2OH
G5 = alkylcarbonyloxy
DER: or salts
MPL: claim 1

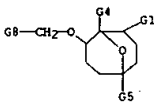
L8 ANSWER 40 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 116:59211 MARPAT
TITLE: Preparation of oxabicyclo ethers as herbicides
INVENTOR(S): Powell, James Edward, Jr.; Richardson, Wendy Sue
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: PCT Int. Appl., 290 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9103464	A1	19910321	WO 1990-US4953	19900905
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
CA 2065337	AA	19910312	CA 1990-2065337	19900905
AU 9063474	A1	19910408	AU 1990-63474	19900905
AU 637406	B2	19930527		
JP 05500063	T2	19930114	JP 1990-512759	19900905
EP 593433	A1	19940427	EP 1990-913636	19900905
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
US 5234900	A	19930810	US 1992-838253	19920311
PRIORITY APPLN. INFO.:			US 1989-431734	19890911
			WO 1990-US4953	19900905

AB The title compds. [I-IV; R = PhCH2, 5- or 6-membered heterocyclyl, or Q, each ring optionally substituted; Z = CH2, NH, alkylimino, O, S, or forming a double bond with an adjacent C; l, m = 0-2; R1 = H, Me, Et, Pr; R2 = H, (un)substituted alkyl, alkenyl, alkynyl, Ph; R3-R6 = H, (un)substituted alkyl, alkenyl, alkynyl; X, Y = H, CR3R4OR6; R6 = (un)substituted alkyl, alkenyl, alkynyl, PhCH2], which are herbicidally active on a wide variety of weeds and exhibit safety to rice, cereals, and broadleaf crops, are prepd. Thus, Diels-Alder reaction of 2,5-dimethylfuran with acryloyl chloride in the presence of AlCl3 at -65 to -50.degree. followed by esterification with MeOH contg. Et3N gave 7-oxabicyclo[2.2.1]hept-5-ene (V; R7 = CO2Me). Side-chain redn. of the latter with LiAlH4 in THF and benzylation of the resultant alc. V (R7 = CH2OH) with PhCH2Br in DMF contg. NaH gave V (R7 = CH2OCH2Ph) which underwent oxidn. by m-ClC6H4CO2OH in CH2Cl2 and redn. of the resulting epoxide with Li triethylborohydride in refluxing THF gave I (R = Y = H, R1 = R2 = Me, X = CH2OCH2Ph) and its regioisomer. Approx. 170 compds. including 3 dioxabicyclooctanes III were prepd. and at 400 g/ha preemergence gave .ltoreq.100% control of, e.g. barnyard grass and giant foxtail, and gave none to moderate injury to crops, e.g. wheat, sugar beet, and rice.

MSTR 4A

L8 ANSWER 40 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)



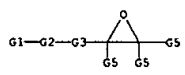
G5 = alkyl<(1-4)> (SR (1-) G6)
G6 = alkoxycarbonyl<(1-3)>
G8 = 2-tetrahydropyranyl (SO (1-) G10)
G10 = OMe
MPL: claim 1

L8 ANSWER 41 OF 41 MARPAT COPYRIGHT 2003 ACS
ACCESSION NUMBER: 110:191278 MARPAT
TITLE: Enzymatic method for preparation of epoxy-substituted aldose or ketose sugars
INVENTOR(S): Godtfredsen, Sven Erik; Bjoerkling, Fredrik
PATENT ASSIGNEE(S): Novo Industri A/S, Den.
SOURCE: Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

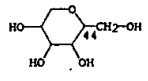
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 268461	A2	19880525	EP 1987-310143	19871117
EP 268461	A3	19891102		
EP 268461	B1	19930303		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
DK 8706017	A	19880519	DK 1987-6017	19871116
DK 159883	B	19901224		
DK 159883	C	19910513		
US 4859589	A	19890822	US 1987-121918	19871117
AT 86305	E	19930315	AT 1987-310143	19871117
ES 2044953	T3	19940116	ES 1987-310143	19871117
JP 63214194	A2	19880906	JP 1987-289649	19871118
PRIORITY APPLN. INFO.:			DK 1986-5498	19861118
			EP 1987-310143	19871117

AB Epoxy-substituted aldose or ketose sugars I [sugar = aldose, ketose; Z = O, S attached to terminal anomeric C-1 (aldose) or C-2 (ketose) of the sugar; Y = (substituted)alkylene; R1, R2, R3 = H, (substituted)alkyl or aryl] are prepd. by reacting sugar-O-X [sugar as above, X = H, (substituted) carbohydrate or alkyl or aryl] with hydroxylated or thiolated epoxide II (R1-R3 as above) in the presence of a glycosidase. Thus, o-nitrophenylgalactopyranoside 5 g, 2,3-epoxy-1-propanol 17.5 mL, and .beta.-galactosidase 50 units in 400 mL buffer were incubated for 4 h. The product 2,3-epoxypropyl-.beta.-D-galactopyranoside 1.1 g was prepd. by extn., SiO2 chromatog., and crystn. Various surfactants, e.g. 1-O-tetradecanoyl-3-O-.beta.-D-galactopyranosylglycerol, were prepd. from this epoxide.

MSTR 1



G1 = 44



G2 = O
G3 = alkylene (SO (1-) G4)

L8 ANSWER 41 OF 41 MARPAT COPYRIGHT 2003 ACS (Continued)

G4 = CO2H
MPL: claim 2
NTE: sugar moieties represented by G1 include .beta.D-galactose,D-ribose, D-xylose, D-arabinose, D-mannose,D-glucose,D-fructose, D-lactose, D-cellobiose, and D-maltose

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=> d his

     (FILE 'HOME' ENTERED AT 07:57:57 ON 12 MAR 2003)

     FILE 'REGISTRY' ENTERED AT 07:58:02 ON 12 MAR 2003
L1              STRUCTURE UPLOADED
L2            0 S L1
L3           25 S L1 FULL

     FILE 'USPATFULL' ENTERED AT 07:58:38 ON 12 MAR 2003
L4            0 S L3

     FILE 'CAPLUS' ENTERED AT 07:58:46 ON 12 MAR 2003
L5           19 S L3

     FILE 'MARPAT' ENTERED AT 08:00:42 ON 12 MAR 2003
L6           42 S L3 FULL
L7           41 S L6/COM
L8           41 S L7 NOT L5
```

L7 ANSWER 14 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:633400 CAPLUS
DOCUMENT NUMBER: 111:233400
TITLE: Enzymatic synthesis of various 1'-O-sucrose and 1-O-fructose esters
AUTHOR(S): Carrea, Giacomo; Riva, Sergio; Secundo, Francesco; Danieli, Bruno
CORPORATE SOURCE: Ist. Chim. Ormoni, Milan, 20131, Italy
SOURCE: J. Chem. Soc., Perkin Trans. 1 (1989), (5), 1057-61
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 111:233400
AB A crude prepn. of the proteolytic enzyme subtilisin has been used to catalyze the regioselective esterification of sucrose in anhyd. DMF. In this way 1'-O-sucrose esters bearing acyl groups of different sizes and types have been synthesized. These sucrose derivs. have been hydrolyzed by yeast .alpha.-glucosidase to the corresponding 1-O-fructose esters, not easily attainable by chem. methods.
IT **104069-90-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(enzymic prepn. of)
RN 104069-90-1 CAPLUS
CN .beta.-D-Fructopyranose, 1-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

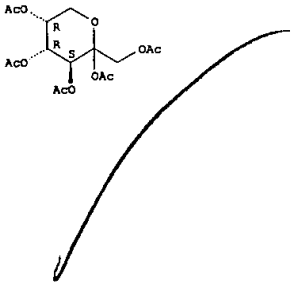
L7 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1988:489965 CAPLUS
DOCUMENT NUMBER: 109:89965
TITLE: Impact-modifying agent for use with smoking articles containing levulinate or carbohydrate ester acetates
INVENTOR(S): Neumann, Calvin Lee; Casey, William James, III
PATENT ASSIGNEE(S): Reynolds, R. J., Tobacco Co., USA
SOURCE: Eur. Pat. Appl., 33 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 270944	A2	19880615	EP 1987-117545	19871127
EP 270944	A3	19890315		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
ZA 8708850	A	19880727	ZA 1987-8850	19871125
AU 8782115	A1	19880616	AU 1987-82115	19871204
JP 63167785	A2	19880711	JP 1987-309776	19871209
HU 47015	A2	19890130	HU 1987-5546	19871209
DK 8706499	A	19880613	DK 1987-6499	19871210
BR 8706704	A	19880719	BR 1987-6704	19871210
DD 286104	A5	19910117	DD 1987-310255	19871210
FI 8705451	A	19880613	FI 1987-5451	19871211
NO 8705177	A	19880613	NO 1987-5177	19871211
CN 87107454	A	19880622	CN 1987-107454	19871211

PRIORITY APPLN. INFO.: US 1986-940818 19861212
AB The invention relates to the use of impact-modifying agents such as carbohydrate acetates, levulinic acid and carbohydrate levulinates, preferably levulinic acid and/or glucose pentaacetate, in smoking articles. Such impact-modifying agents modulate the impact of the aerosol by controlling the degree of the harshness of the aerosol produced by such articles, e.g. by reducing the irritation and impact in the mouth, nose and throat, without the prodn. of undesirable side products such as aldehydes, ketones and CO. In addn., there is a redn. in migration of the impact-modifying agent which improves the shelf life of smoking articles. Preferred smoking articles employing impact-modifying agents are capable of producing substantial quantities of aerosol without significant thermal degrdn. of the aerosol former and without the presence of substantial pyrolysis or incomplete combustion products or sidestream smoke. Moreover, they provide the user with the sensations of cigarette smoking without the necessity of burning tobacco. Smoking articles which may employ impact-modifying agents include: (1) a nontobacco fuel element; (2) a phys.-sep. aerosol generating means; and (3) an aerosol delivery means such as a longitudinal passageway in the form of a mouth end piece. Preferably, the smoking article is of the cigarette type, which utilizes a short, i.e., <30 mm long, preferably carbonaceous, fuel element in conjunction with a phys.-sep. aerosol generating means having one or more aerosol forming materials. This aerosol generating means is preferably in a conductive heat exchange relationship with the fuel element. The impact-modifying agent may be employed in any component of such articles which permits delivery of aerosol to the user including one or more of the above described components of such articles. Preferably, it is employed in the phys. sep. aerosol generating means.

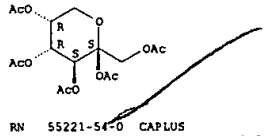
L7 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2002 ACS (Continued)
IT **6866-50-8**, Fructose pentaacetate
RL: BIOL (Biological study)
(aerosol-forming material contg., for cigarette-type smoking articles to improve palatability)
RN 6866-50-8 CAPLUS
CN Fructopyranose, pentaacetate (7CI, 9CI) (CA INDEX NAME)

Relative stereochemistry.



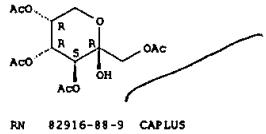
L7 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1988:204907 CAPLUS
DOCUMENT NUMBER: 108:204907
TITLE: Mass spectra of O-acetyl derivatives of 2-keto hexoses and their glycosides
AUTHOR(S): Lee, Cheang Kuan
CORPORATE SOURCE: Dep. Chem., Natl. Univ. Singapore, Kent Ridge, 0511, Singapore
SOURCE: Org. Mass Spectrom. (1987), 22(8), 553-6
CODEN: ORMSBG; ISSN: 0030-493X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Mass spectral data of acetylated keto pyranoses or pyranosides (11 compds.) and keto furanosides (3 compds.) are given and discussed.
IT **20764-61-8 55221-54-0 82916-88-9**
109525-53-3 114388-89-5 114388-90-8
114421-67-9
RL: PRP (Properties)
(mass spectra of)
RN 20764-61-8 CAPLUS
CN .beta.-D-Fructopyranose, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



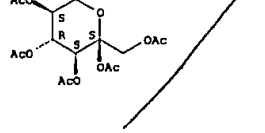
RN 55221-54-0 CAPLUS
CN .beta.-D-Fructopyranose, 1,3,4,5-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



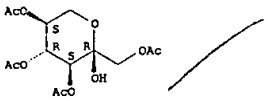
RN 82916-88-9 CAPLUS
CN .alpha.-L-Sorbopyranose, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



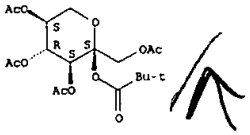
L7 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 109525-53-3 CAPLUS
CN .alpha.-L-Sorbopyranose, 1,3,4,5-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



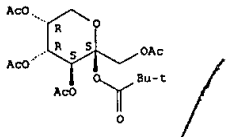
RN 114388-89-5 CAPLUS
CN .alpha.-L-Sorbopyranose, 1,3,4,5-tetraacetate 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 114388-90-8 CAPLUS
CN .beta.-D-Fructopyranose, 1,3,4,5-tetraacetate 2-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

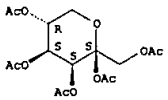
Absolute stereochemistry.



RN 114421-67-9 CAPLUS
CN .beta.-D-Tagatopyranose, pentaacetate (9CI) (CA INDEX NAME)

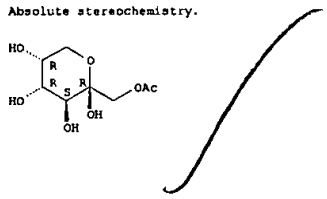
Absolute stereochemistry.

L7 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2002 ACS (Continued)



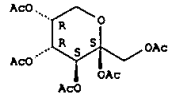
L7 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1986:511258 CAPLUS
DOCUMENT NUMBER: 105:111258
TITLE: Facile enzymatic preparation of monoacylated sugars in pyridine
AUTHOR(S): Therisod, Michel; Klibanov, Alexander M.
CORPORATE SOURCE: Dep. Appl. Biol. Sci., Massachusetts Inst. Technol., Cambridge, MA, 02139, USA
SOURCE: J. Am. Chem. Soc. (1986), 108(18), 5638-40
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Porcine pancreatic lipase vigorously catalyzed transesterification reactions between various sugars and trichloroethyl carboxylates in anhyd. pyridine. Due to a marked regioselectivity exhibited by the enzyme in that reaction, millimolar quantities of cryst. 6-O-acylglucoses (where acyl = Ac, butyryl, capryloyl, and lauryl) were prepd. Lipase also catalyzed the acylation of galactose, mannose, and fructose; in all cases primary hydroxyl groups were enzymically acylated in pyridine on a preparative scale.
IT **104069-90-1P**
RL: PREP (Preparation)
(prepn. of, with lipase in anhyd. pyridine)
RN 104069-90-1 CAPLUS
CN .beta.-D-Fructopyranose, 1-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



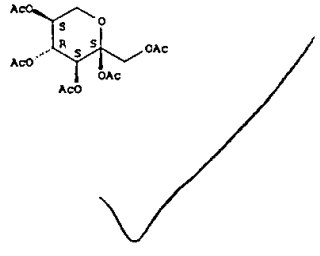
L7 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1982:527939 CAPLUS
DOCUMENT NUMBER: 97:127939
TITLE: Preparation of unsaturated carbohydrates by ester pyrolysis. III. Thermal cis eliminations from completely acetylated ketopyranoses
AUTHOR(S): Koell, Peter; Steinweg, Eberhard; Metzger, Juergen; Meyer, Bernd
CORPORATE SOURCE: Fachber. Chem., Univ. Oldenburg, Oldenburg, D-2900, Fed. Rep. Ger.
SOURCE: Liebigs Ann. Chem. (1982), (6), 1052-62
CODEN: LACHDL; ISSN: 0170-2041
DOCUMENT TYPE: Journal
LANGUAGE: German
AB 1,2,3,4,5-Penta-O-acetyl-.alpha.-L-sorbopyranose and -.beta.-D-fructopyranose regioselectively eliminated 2-O-Ac group as AcOH within 0.5-1 min in Me2CO at 230-270.degree. in a flow app. Primarily the Z isomers I and II with the exocyclic double bond were formed. At higher temps. the thermodn. more stable E isomers were also formed. Conformations of I and II and their E isomers were detd. by NMR spectroscopy. From these compds. tetraacetyl-2,6-anhydro-3-deoxy-al-hex-2-enoses were formed by [3.3]sigmatropic rearrangement.
IT **20764-61-8 82916-88-9**
RL: RCT (Reactant)
(pyrolysis of)
RN 20764-61-8 CAPLUS
CN .beta.-D-Fructopyranose, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



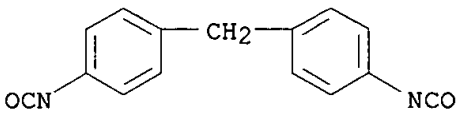
RN 82916-88-9 CAPLUS
CN .alpha.-L-Sorbopyranose, pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



8 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN 2-Oxepanone, homopolymer, ester with .beta.-D-fructofuranosyl .alpha.-D-glucopyranoside, polymer with 1,1'-methylenebis[4-isocyanatobenzene] (9CI)
MF (C15 H10 N2 O2 . C12 H22 O11 . x (C6 H10 O2)x)x
CI PMS

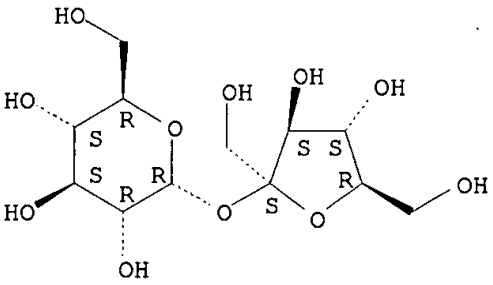
CM 1



CM 2

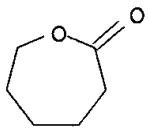
CM 3

Absolute stereochemistry.



CM 4

CM 5



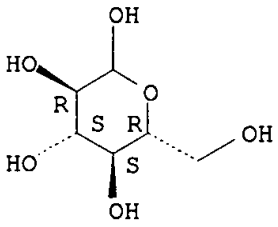
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):7

L2 8 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN 2-Oxepanone, homopolymer, ester with D-glucopyranose (5:1) (9CI)
MF C6 H12 O6 . 5 (C6 H10 O2)x

RELATED POLYMERS AVAILABLE WITH POLYLINK

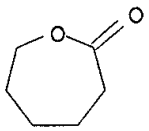
CM 1

Absolute stereochemistry.



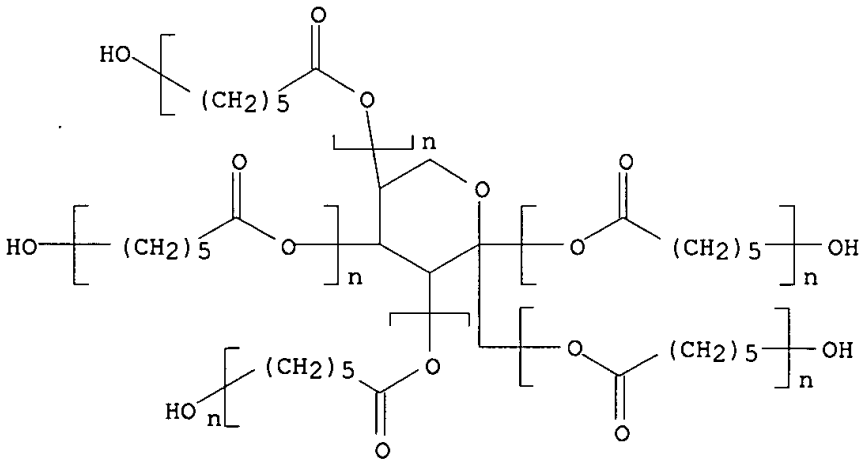
CM 2

CM 3



L2 8 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN Poly[oxy(1-oxo-1,6-hexanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with D-fructopyranose (5:1) (9CI)
MF (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n C6 H12 O6
CI PMS, COM

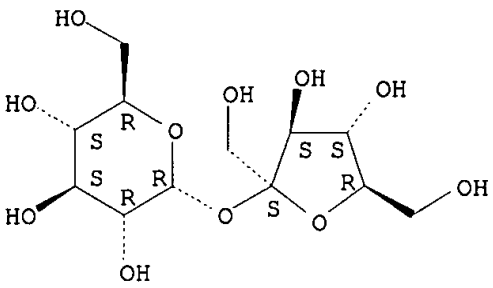
RELATED POLYMERS AVAILABLE WITH POLYLINK



L2 8 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN 2-Oxepanone, homopolymer, ester with .beta.-D-fructofuranosyl .alpha.-D-glucopyranoside (9CI)
MF C12 H22 O11 . x (C6 H10 O2)x
CI COM

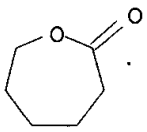
CM 1

Absolute stereochemistry.



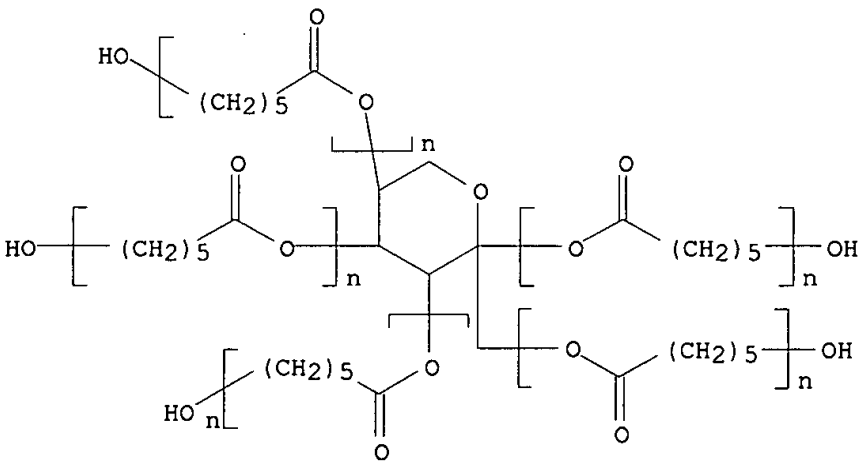
CM 2

CM 3

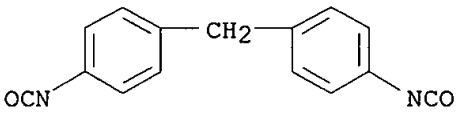


L2 8 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN Poly[oxy(1-oxo-1,6-hexanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with D-fructopyranose (5:1), polymer with 1,1'-methylenebis[4-isocyanatobenzene] (9CI)
MF (C15 H10 N2 O2 . (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n C6 H12 O6)x
CI PMS

CM 1

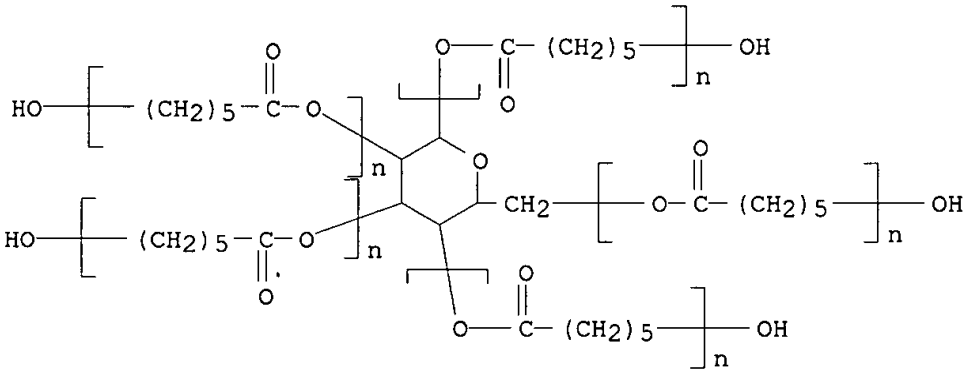


CM 2



L2 8 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN Poly[oxy(1-oxo-1,6-hexanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with D-glucopyranose (5:1) (9CI)
MF (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n C6 H12 O6
CI PMS, COM

RELATED POLYMERS AVAILABLE WITH POLYLINK

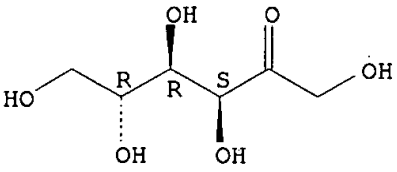


L2 8 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN 2-Oxepanone, homopolymer, ester with D-fructose (5:1) (9CI)
MF C6 H12 O6 . 5 (C6 H10 O2)x

RELATED POLYMERS AVAILABLE WITH POLYLINK

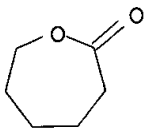
CM 1

Absolute stereochemistry.



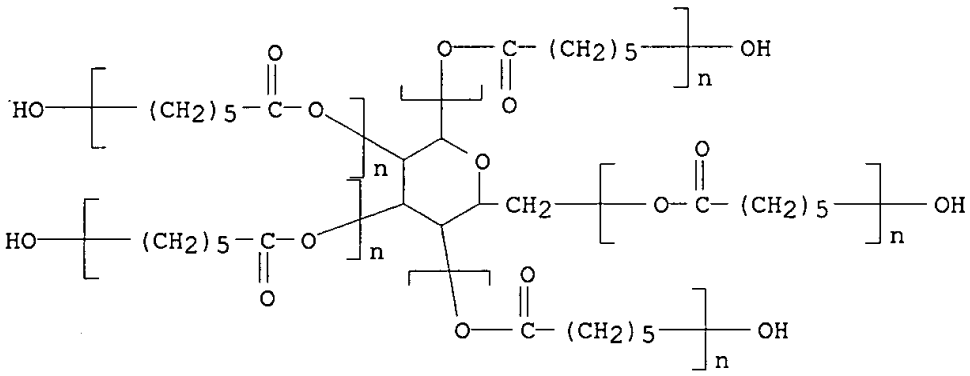
CM 2

CM 3

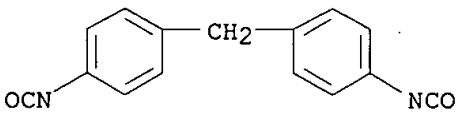


L2 8 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN Poly[oxy(1-oxo-1,6-hexanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with D-glucopyranose (5:1), polymer with 1,1'-methylenebis[4-isocyanatobenzene] (9CI)
MF (C15 H10 N2 O2 . (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n C6 H12 O6)x
CI PMS

CM 1



CM 2



ALL ANSWERS HAVE BEEN SCANNED

=> d ibib ab fqhit 1-21

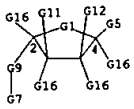
L8 ANSWER 1 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 138:397888 MARPAT
TITLE: Oligonucleotides containing .alpha.-L-ribonucleosides, their synthesis and use in diagnosis and therapy
INVENTOR(S): Wengel, Jesper
PATENT ASSIGNEE(S): Exiqon A/S, Den.
SOURCE: PCT Int. Appl., 141 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003039523	A2	20030515	WO 2002-IB5080	20021105
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: DK 2001-1640 20011105
US 2001-337447P 20011105

AB The invention relates to novel .alpha.-L-RNA monomers, which, when incorporated into an oligonucleotide impair a higher tendency towards hybridization with a RNA complement, as compared to a DNA complement. The invention also relates to a process for the prepn. of an .alpha.-L-RNA modified oligonucleotide and an intermediate for manufg. the same. The novel oligonucleotides are useful for a variety of therapeutic, diagnostic, and general mol. biol. applications. Thus, oligonucleotides comprising .alpha.-L-RNA monomers sometimes exhibited lower hybridization tendencies with DNA than with RNA. The hybridization efficiency may be increased by incorporating LNA monomers into the oligonucleotide. Introduction of .alpha.-L-RNA monomers in oligonucleotides increased their resistance to nucleases.

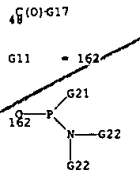
MSTR 1



G1 = 8-2 9-4

L8 ANSWER 1 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

G3 = O
G5 = OH
G9 = Ak<EC (1-) C, BD (0-) D (0-) T> (SO (1-) G10)
G10 = OH / 48 / alkylcarbonyl<(1-12)>



G11 = 162

G12 = OH
G16 = OH
MPL: claim 1
NTE: additional oxo, thioxo, imino, methylene, double bond or ring formation also claimed
NTE: also incorporates claim 33

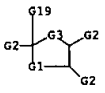
L8 ANSWER 2 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 136:263380 MARPAT
TITLE: Carbohydrate based lipid compositions and supramolecular structures comprising same
INVENTOR(S): Grinstaff, Mark W.; Hird, Geoffrey S.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 28 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002035082	A1	20020321	US 2001-877391	20010608

PRIORITY APPLN. INFO.: US 2000-210694P 20000609

AB Lipids such as I (n = 10, 12, and 18) were prepd. Examples are also given for thermal anal., x-ray diffraction, cholesterol interactions, and phospholipase assays. The lipids have supramol. structure and may be used in prepn. of liposomes for drug delivery.

MSTR 1



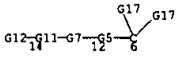
G1 = (1-3) 10

G2 = OH / 46

G3 = O
G7 = 22-14 23-12

G13 = Ak<EC (6-) C, BD (0-) D (0-) T> (SO (1-) G14)
G14 = OPO3H2
G19 = 6

L8 ANSWER 2 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



MPL: claim 1
NTE: substitution is restricted

L8 ANSWER 3 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 135:312738 MARPAT
TITLE: Ternary ligand complexes containing highly functionalized triphenylphosphines useful as radiopharmaceuticals
INVENTOR(S): Liu, Shuang
PATENT ASSIGNEE(S): Dupont Pharmaceuticals Company, USA
SOURCE: PCT Int. Appl., 210 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

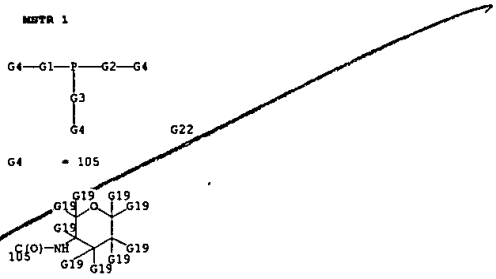
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001077122	A1	20011018	WO 2001-US11387	20010406
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002012631	A1	20020131	US 2001-826449	20010405
US 6534038	B2	20030318		
EP 1268497	A1	20030102	EP 2001-924822	20010406
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.: US 2000-195235P 20000407
WO 2001-US11387 20010406

AB This invention relates to novel highly functionalized triphenylphosphine ligands as ancillary ligands in radiopharmaceuticals. Also, this invention provides radiopharmaceuticals comprised of highly functionalized phosphine ligated 99mTc labeled hydrazinonicotinamide (HYNIC)-conjugated biomols. that selectively localize at sites of disease and thus allow an image to be obtained of the loci using gamma scintigraphy. The chelator-modified biomols. include IIb/IIIa antagonists, tuftsin, receptor antagonists, chemotactic peptides, vitronectin receptor antagonists, tyrosine kinase inhibitors, and aminocarboxylates. The invention also provides methods of use of the radiopharmaceuticals as imaging agents for the diagnosis of cardiovascular disorders such as thromboembolic disease or atherosclerosis, infectious disease and cancer. The invention further provides kits for the prepn. of the radiopharmaceuticals. The highly functionalized phosphines contain hydroxy or polyhydroxy functionalities which are of interest because they can form neutral 99mTc complexes. The highly functionalized phosphines can contain carboxy or polycarboxy functionalities which are used to increase hydrophilicity and to improve blood clearance and renal excretion of the 99mTc-labeled biomol. The highly functionalized phosphines can also contain metabolizable ester or polyester functionalities and form neutral 99mTc complexes (if there is no charge on the biomol.), which can cross the cell membrane and potentially bind intracellular receptors. In an example, the functionalized ligand P(C6H4(CONHCH2CH2OH)-p)3 (L3) was prepd. The ligand was reacted with [99mTc]pertechnetate in the presence of HYNIC-Ln-Q, a HYNIC-conjugated

L8 ANSWER 3 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
biomol., and with tricine, to give [99mTc(HYNIC-Ln-Q)(tricine)(L3)] in >70% yield.

MSTR 1



G4 = 105

G5 = Ak<EC (-10) C, BD (0-) D (0-) T> (SO (1-) G8)
G9 = OH / CO2H / alkoxycarbonyl<(1-6)> (SO (-5) OH) / alkyl<(1-10)> (SO (1-5) G11)
G10 = CF3 / CN / 58

G19 = OH / 155

G20 = OH
MPL: claim 1
NTE: and radiopharmaceuticals with G22 metals or pharmaceutically acceptable salt forms
NTE: additional oxo substitution also claimed
NTE: substitution is restricted

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 134:227367 MARPAT
TITLE: High viscosity liquid controlled delivery system and medical or surgical device
INVENTOR(S): Gibson, John W.; Sullivan, Stacey A.; Middleton, John G.; Tipton, Arthur J.
PATENT ASSIGNEE(S): Southern Biosystems, Inc., USA
SOURCE: PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

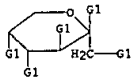
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001015734	A2	20010308	WO 2000-US23270	20000824
WO 2001015734	A3	20010913		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6413536	B1	20020702	US 1999-385107	19990827
EP 1212092	A2	20020612	EP 2000-961358	20000824
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003508449	T2	20030304	JP 2001-520145	20000824

PRIORITY APPLN. INFO.: US 1999-385107 19990827
US 1995-474337 19950607
US 1995-478450 19950607
US 1997-944022 19970915
WO 2000-US23270 20000824

AB The present invention relates to novel nonpolymeric compds. and compns. that form liq., high viscosity materials suitable for the delivery of biol. active substances in a controlled fashion, and for use as medical or surgical devices. The materials can optionally be dild. with a solvent to form a material of lower viscosity, rendering the material easy to administer. This solvent may be water insol. or water sol., where the water sol. solvent rapidly diffuses or migrates away from the material in vivo, leaving a higher viscosity liq. material. A compd. 1,6-hexanediol lactate ε-hydroxycaproic acid was prepd. and dissolved in N-methylpyrrolidone at a wt. ratio of 70:30, and then 10 % bupivacaine base was added to this mixt. and dissolved. Drops weighing approx. 100 mg were pptd. into 40 mL buffer. Samples of buffer were removed at specified times and replaced with fresh buffer. Buffer samples were analyzed by UV-vis spectrophotometry at 265 nm to det. the concn. of bupivacaine in each buffer sample.

MSTR 4

L8 ANSWER 4 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G1 = OH / alkanoyloxy (SO OH)
MPL: claim 31

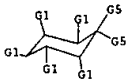
L8 ANSWER 5 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 134:178271 MARPAT
TITLE: Process for preparing substituted cyclohexanoic acids via .alpha.-chloroepoxy esters
INVENTOR(S): Diederich, Ann M.; Novak, Vance J.
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001010822	A1	20010215	WO 2000-US21394	20000804
W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CZ, DZ, EE, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, TZ, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
BR 2000013025	A	20020416	BR 2000-13025	20000804
EP 1200394	A1	20020502	EP 2000-953844	20000804
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003506431	T2	20030218	JP 2001-515289	20000804
NO 2002000561	A	20020205	NO 2002-561	20020205

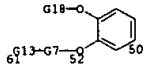
PRIORITY APPLN. INFO.: US 1999-147576P 19990806
WO 2000-US21394 20000804
OTHER SOURCE(S): CASREACT 134:178271

AB A process for prepg. substituted cyclohexanoic acids I is proposed, where Ra is a carbon-contg. group optionally linked by oxygen, sulfur or nitrogen to the cyclohexyl ring and n is 1-10; and R and R* are independently but not simultaneously hydrogen or C(O)E where E is OR14 or SR14, where R14 is hydrogen or alkyl of 1-6 carbon atoms; which process comprises treating an epoxide II with DMSO and an alkali metal salt, wherein E is OR14 or SR14, where R14 is hydrogen or alkyl of 1-6 carbon atoms; Ra is the same as defined for I; and Y is Br, Cl, F or I. Thus, .alpha.-chloroepoxy ester III was prepd. via reaction of 4-cyano-4-(3-cyclopentyloxy-4-methoxyphenyl)cyclohexan-1-one with Me dichloroacetate and tert-butoxide in THF, subsequently sapond. and the corresponding chloroepoxy acid treated with DMSO, NaCl and water, and heated to 150 .degree.C for 3.5 h to yield IV (59%).

MSTR 1

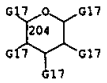


L8 ANSWER 5 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
G2 = 50



G7 = 64-61 62-52

G8 = alkylene<(1-)> (SO (1-) G11)
G9 = O
G12 = alkylene<(1-)> (SO (1-) G11)
G13 = 204



G17 = OH
MPL: claim 1
NTE: substitution is restricted

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

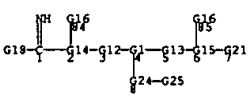
L8 ANSWER 6 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 133:17462 MARPAT
TITLE: Preparation of hydroxyalkylheteroaromatics as factor Xa inhibitors
INVENTOR(S): Phillips, Gary B.
PATENT ASSIGNEE(S): Berlex Laboratories, Inc., USA
SOURCE: PCT Int. Appl., 71 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000031069	A1	20000602	WO 1999-IB2067	19991117
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6262088	B1	20010717	US 1998-196921	19981119
EP 1131315	A1	20010912	EP 1999-959637	19991117
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002530401	T2	20020917	JP 2000-583896	19991117
US 2001023291	A1	20010920	US 2001-849133	20010504
US 6559147	B2	20030506		
US 2001023292	A1	20010920	US 2001-849146	20010504
US 6492376	B2	20021210		
US 2001025108	A1	20010927	US 2001-849319	20010504
US 6495574	B2	20021217		
US 2001044536	A1	20011122	US 2001-849121	20010504
US 6495684	B2	20021217		
US 2001044537	A1	20011122	US 2001-849335	20010504
US 6552030	B2	20030422		
US 2003149040	A1	20030807	US 2003-351552	20030124

PRIORITY APPLN. INFO.: US 1998-196921 19981119
WO 1999-IB2067 19991117
US 2001-849335 20010504

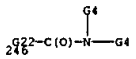
AB Title compd. I {R = 1-methylimidazolin-2-yl (sic)} was prepd. Data for biol. activity of title compds. were given.

MSTR 1

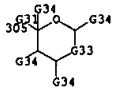


G21 = 246

L8 ANSWER 6 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G22 = CHOH
G24 = O
G25 = 305



G27 = O
G33 = (0-1) 308

G37 = (1-2) CH2
DER: or pharmaceutically acceptable salts
MPL: claim 1
NTE: substitution is restricted
STE: single stereoisomer or mixture

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 132:12479 MARPAT
TITLE: combinatorial libraries and solid phase synthesis of glycosides and glycopeptides
INVENTOR(S): Sofia, Michael J.; Jain, Rakesh K.; Vaughan, Andrew; Gange, David M.; Ghosh, Manuka
PATENT ASSIGNEE(S): Incara Pharmaceuticals Corp., USA
SOURCE: PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9961583	A2	19991202	WO 1999-US12032	19990528
WO 9961583	A3	20000406		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

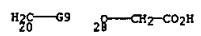
PRIORITY APPLN. INFO.: US 1998-87072P 19980528

AB A compd. of structure I wherein X is O or S; Z is O or NH; Y is COOH, COOR2 , CH2OR3, CH3, or CHsY2(3-s) where Y2 is F, Cl, Br or I, and s is 0, 1, or 2 or Y and one of ZR4 and OR5 are linked to form a 6-membered cyclic acetal; Q = (CH2)n; p is 0 or 1; m is 0 or 1; n is 1 or 2. A library of compds. of structure II wherein X is O or S; Q = (CH2)n; A1 is a residue of an .alpha.-amino acid attached through a terminal amino, a peptide residue comprising residues of from 2 to 10 .alpha.-amino acids and attached through a terminal amino, R1 O, R1S, R1, R1NH or R1N-alkyl; A2 is a residue of an .alpha.-amino acid attached through a terminal carboxyl, a peptide residue comprising residues of from 2 to 10 .alpha.-amino acids and attached through a terminal carboxyl, R2SO2, R2NHCO, R2OP(O)(OR6), R2P(O)(OR6) or R2, or A2, A3 and N combine to form a nitrogen heterocycle; A3 is hydrogen when A3 is not combined with A2 and N; A4 is OR4, NHR4, CH2OR4 or CH3; A5 is O, NH or N-alkyl; p, q and r are independently 0 or 1; Y1 and Y2 are independently O or CH2; each of L1 and L2 is independently a difunctional alkyl, aryl, aralkyl, alkanoyl, aroyl or aralkanoyl group; L3 is a single bond, CH2, carbonyl, OP(O)(OR7), NHP(O)(OR7), P(O)(OR7). Thus, solid phase prepn. of Me 4-azido-4-deoxy-3O-benzoyl-2'-O-carboxymethyl-.alpha.-D-fucopyranoside using peptide-bound resins is reported.

NSTR 1

L8 ANSWER 7 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

G1 = (1-2) CH2 (SO G2)
G2 = 20 / 28



G3 = O
G9 = OH
MPL: claim 1
NTE: substitution is restricted
NTE: additional substitution and ring formation also claimed
NTE: also incorporates claim 55

L8 ANSWER 8 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 129:343328 MARPAT
TITLE: Preparation of new benzyl- and (phenylethyl)amine derivatives as medicaments
INVENTOR(S): Anderskewitz, Ralf; Schromm, Kurt; Renth, Ernst-Otto; Birke, Franz; Jennewein, Hans Michael; Meade, Christopher John Montague
PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

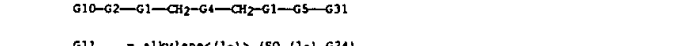
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9849131	A1	19981105	WO 1998-EP2530	19980429
CN 1204315	A	19990106	CN 1996-198959	19961211
DE 19718334	A1	19981105	DE 1997-19718334	19970430
ZA 9803523	A	19981030	ZA 1998-3523	19980428
AU 9877600	A1	19981124	AU 1998-77600	19980429
EP 980351	A1	20000223	EP 1998-925500	19980429
JP 2001524966	T2	20011204	JP 1998-546609	19980429
MX 9909960	A	20000630	MX 1999-9960	19991028
US 6288277	B1	20010911	US 2000-423160	20000403

W: AU, BG, BR, BY, CA, CN, CZ, EE, HU, ID, IL, JP, KR, KZ, LT, LV, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, UZ, VN, YU
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRIORITY APPLN. INFO.: DE 1997-19718334 19970430
WO 1998-EP2530 19980429

AB The title compds. [I; X, Y = O, NH, NMe2, CH2; R1, R2 = H, OH, F, Cl, Br, iodo, C1-6 alkyl, O(C1-6 alkyl), CF3; R3 = H, NH2, NHCOR5; R4 = H, CH2NH2, CH2NHCOR5; R5 = H, C1-6 alkyl, (un)substituted Ph, O(C1-6 alkyl)]; A = CR6R7, CO, SOx, O; R6 = H, C1-4 alkyl, CF3, etc.; R7 = H, C1-4 alkyl, etc.; B = C1-6 alkyl, Ph, naphthyl, thienyl, pyridyl, etc.; x = 0-2; with provisos] and their optical isomers, mixts. of enantiomers, racemates and salts with pharmaceutically acceptable acids, LTB4 antagonists useful for the therapy of arthritis, asthma, chronical lung diseases, , psoriasis, cystic fibrosis, Alzheimer's disease, etc., were prepd. For example, dissolving 1.15 g 4-(H2NCH2CH2)C6H4OH in 15 mL MeOH, adding 1.5 g NaOMe (30% soln. in MeOH), evapg. the mixt., adding the residue to a soln. of 2.93 g 3-[4-(2-phenylpropyl)phenoxymethyl]benzyl chloride in 25 mL MeCN, stirring the whole for 3 h at 60-70.degree., evapg. the solvents and treating the residue with alc. HCl gave 1 g II-HCl (m. 145.degree.). Approx. 34 I were prepd. and Ki values for approx. 32 I varying between 0.5 and 263 nM were given.

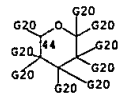
NSTR 1



G11 = alkylene<(1-)> (SO (1-) G24)
G13 = 37

L8 ANSWER 8 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

G17 = 44



G20 = OH / CH2OH
G24 = CO2H / alkoxycarbonyl<(1-6)> (SO (1-) G30) / OH
DER: and acid addition salts
MPL: claim 1
NTE: substitution is restricted
NTE: also incorporates claim 4, sturcture IV
STE: and optical isomers, enantiomeric mixtures, or racemates

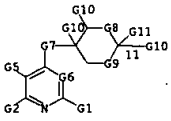
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 127:331498 MARPAT
TITLE: Substituted pyridines and pyrimidines as pest control agents
INVENTOR(S): Braun, Ralf; Schaper, Wolfgang; Knauf, Werner; Sanft, Ulrich; Kern, Manfred; Bonin, Werner
PATENT ASSIGNEE(S): Hoechst Schering Agrevo Gmbh, Germany
SOURCE: Ger. Offen., 30 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19613329	A1	19971009	DE 1996-19613329	19960403
CA 2250836	AA	19971016	CA 1997-2250836	19970324
WO 9737991	A1	19971016	WO 1997-EP1483	19970324
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, UZ, VN, YU				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9721597	A1	19971029	AU 1997-21597	19970324
EP 892798	A1	19990127	EP 1997-914297	19970324
R: DE, ES, FR, GB, IT				
JP 2000508636	T2	20000711	JP 1997-535788	19970324
US 6207668	B1	20010327	US 1997-829841	19970401
ZA 9702794	A	19971031	ZA 1997-2794	19970402
PRIORITY APPLN. INFO.:			DE 1996-19613329	19960403
			WO 1997-EP1483	19970324

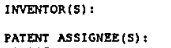
AB Title compds. I [A = CH, N; X = O, S, SO, SO2; R = substituted satd. 5- or 6-membered O, S, or N heterocycle; R1 = H, ha logen, alkyl, haloalkyl, cycloalkyl; R2, R3 = H, (un)substituted aliph., alkoxy, alkylthio, acyl, cycloalkyl, trialkylsilyl, cyano, thiocyano, esterified CO2H; R2R3 = atoms required to complete a 5- or 6-membered ring] were prepd. for use as fungicides, insecticides, acaricides and ovicides. Thus, the pyrimidine II was prepd. by treating 4,5-dichloro-6-ethylpyrimidine with th amine which was prepd. from benzaldehyde and allyl bromide in 6 steps. II had insecticidal activity against Musca domestica at 300 ppm.

MSTR 1



G2 = alkyl<(1-4)> (SR alkoxycarbonyl<(1-4)>)

L8 ANSWER 9 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
G7 = O
G8 = 25



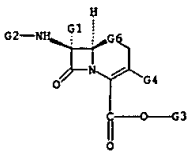
G9 = O
G10 = alkoxy<(1-4)> (SO (1-) G12)
G11 = CH2OMe
DER: and salts
MPL: claim 1
NTE: substitution is restricted
NTE: additional ring formation also specified

L8 ANSWER 10 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 125:114393 MARPAT
TITLE: Process for the preparation of cephalosporins and analogs
INVENTOR(S): Burton, George; Naylor, Antoinette
PATENT ASSIGNEE(S): Pfizer Inc., USA
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

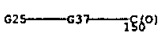
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9617847	A1	19960613	WO 1995-GB2783	19951129
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRIORITY APPLN. INFO.:			GB 1994-24847	19941209
OTHER SOURCE(S):		CASREACT 125:114393		

AB Cephalosporins I [X = S, SO, SO2, O, CH2; R1 = H, OMe, NHCHO; R2 = acyl; R3 = in vivo hydrolizable ester group; R4 = (un)substituted tetrahydrofuryl, tetrahydropyranyl] are prepd. by reaction of the corresponding carboxylic acid with R3Y [Y = halide] in the presence of an aq. phase contg. a base and a phase transfer catalyst. Subsequent removal of protecting groups, conversion of groups X and R2 and salt formation may be carried out. Thus, 4-methoxybenzyl (6R,7R)-7-phenylacetamido-3-[(S)-2-tetrahydrofuryl]cephem-4-carboxylate was treated with Me3CCO2CH2I, followed by deacylation and reacylation to give pivaloyloxymethyl (6R,7R)-7-[2-(2-amino-4-thiazolyl)-2-(Z)-methoxyiminoacetamido]-3-[(S)-2-tetrahydrofuryl]cephem-4-carboxylate.

MSTR 1

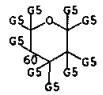


G2 = 150



G4 = 60

L8 ANSWER 10 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G5 = alkoxy<(1-6)> / alkyl<(1-6)> (SR alkoxy<(1-6)>)
G25 = alkyl<(1-6)> (SO)
G37 = alkylene<EC (1-5) C, DC (0) M3> (SO (1) G38)
G38 = CO2H (SO) / OH
MPL: claim 1

L8 ANSWER 11 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 124:343981 MARPAT
TITLE: Synthesis of glycopyranosides as antitumors
INVENTOR(S): Billington, David; Dorey, Gilbert; Leon, Pascale; Atassi, Ghanem; Pierre, Alain; Burbridge, Michael; Guilbaud, Nicolas
PATENT ASSIGNEE(S): Adir Et Compagnie, Fr.
SOURCE: Eur. Pat. Appl., 48 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 699679	A1	19960306	EP 1995-401971	19950830
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
FR 2723947	A1	19960301	FR 1994-10462	19940831
FR 2723947	B1	19960927		
FI 9504026	A	19960301	FI 1995-4026	19950828
CA 2157156	AA	19960301	CA 1995-2157156	19950829
AU 9530345	A1	19960314	AU 1995-30345	19950829
AU 689290	B2	19980326		
NO 9503400	A	19960301	NO 1995-3400	19950830
JP 08073484	A2	19960319	JP 1995-221904	19950830
CN 1127757	A	19960731	CN 1995-116910	19950830
US 5595976	A	19970121	US 1995-521189	19950830
ZA 9507322	A	19960409	ZA 1995-7322	19950831

PRIORITY APPLN. INFO.: FR 1994-10462 19940831
AB Title glycopyranosides, e.g. I (R = alkyl; R1 = alkyl, alkoxy; R2,R3 = H, alkyl, alkoxy; R4 = H, alkyl; R5,R6 = H , OH, heterocycle, amide), were prepd. as antitumors. Thus, glycoside II was prepd. and tested for its antitumor and cytotoxic activities.

MSTR 1

G1 = 7

G2 = OH
G5 = OH
G6 = 30

L8 ANSWER 11 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

G9 = 49

G10 = 51

G11 = alkoxycarbonyl<(1-6)>
G16 = OH
G18 = 79

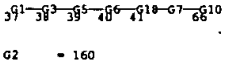
G19 = OH
DER: and pharmaceutically acceptable acid addition salts
MPL: claim 1
STE: and optical and geometric isomers

L8 ANSWER 12 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 124:9455 MARPAT
TITLE: Preparation of carbohydrate-containing peptides which bind to carbohydrate binding receptors.
INVENTOR(S): Meldal, Morten; Christensen, Mette Knak; Rozarth, Henriette Cordes
PATENT ASSIGNEE(S): Carlsberg A/S, Den.; Mouritsen and Elsner A/S
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9514036	A1	19950526	WO 1994-DK432	19941116
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ				
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9510632	A1	19950606	AU 1995-10632	19941116

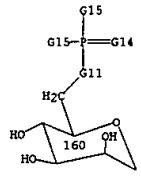
PRIORITY APPLN. INFO.: DK 1993-1292 19931116
WO 1994-DK432 19941116
AB A1-A2(R1)-(A3)m-A4(R2)-(A5)n-A6(R3)-A7 [R1-R3 = (chem. modified) D- or L-Glc, -Man, -Gal, -Fuc, GlcNAc, GalNAc, Fru, Neu5Ac or oligosaccharides thereof; A1, A7 = H, OH, NH2, residues of D- or L-amino acids, peptides, glycopeptides, peptidomimetics, oligonucleotides; A2, A4, A6 = residues of D- or L-hydroxyamino acids, e.g. Ser, Thr, Tyr, or -carboxamidoamino acids, e.g. Asn, Gln; A3, A5 = residues of genetically encoded or non-encoded D- or L-amino acids, peptidomimetics, nucleotides; m, n = 1-15; any residue in the sequence A1-A7 may be covalently linked to form a cyclic deriv], were prepd. Thus, Ac-Thr(Q)-Lys(Y)-Thr(Q)-NH2 (Q = P-6-D-Man-.alpha.-(1,2)-D-Man, Y = anthranilate), prepd. by multiple column peptide synthesis on derivatized PEGA resin, showed a strong specific inhibition of the interaction between cation-independent mannose 6-phosphate receptor and solid phase bound mannose 6-phosphate.

MSTR 1



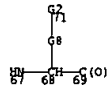
G2 = 160

L8 ANSWER 12 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G4 = 26-2 27-11

G6 = 67-39 69-41



G8 = 112-68 114-71

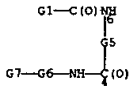
G11 = O
DER: or pseudopeptide derivatives
MPL: claim 1
NTE: additional ring formation specified
STE: 247,258,270,281 - .alpha.-D-MANNO
STE: 2,46,68,75,81,88 - D,L

L8 ANSWER 13 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 121:292774 MARPAT
TITLE: Biologically active bistramides, process for their production, and their cytostatic applications in therapy, especially against tumors or parasites
INVENTOR(S): Biard, Jean Francois; Cortadellas, Dominique; Debitus, Cecile; Laurent, Dominique; Roussakis, Cristos; Verbist, Jean Francois
PATENT ASSIGNEE(S): Institut Francais de Recherche Scientifique pour Le Development Cooperation, Fr.
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9420503	A1	19940915	WO 1994-FR256	19940308
W: AU, BR, CA, JP, NZ, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2702478	A1	19940916	FR 1993-2662	19930308
FR 2702478	B1	19950505		
FR 2707644	A1	19950120	FR 1993-7925	19930629
FR 2707644	B1	19950929		
CA 2157760	AA	19940915	CA 1994-2157760	19940308
AU 9462108	A1	19940926	AU 1994-62108	19940308
AU 679501	B2	19970703		
EP 688323	A1	19951227	EP 1994-909165	19940308
R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, SE				
US 5798381	A	19980825	US 1996-513923	19960304
PRIORITY APPLN. INFO.:			FR 1993-2662	19930308
			FR 1993-7925	19930629
			WO 1994-FR256	19940308

AB Bistramide derivs. (Markush included) (excluding A, B and C bistramides) with virtually no toxic effects are disclosed. The bistramides are useful esp. as drugs having a cytostatic effect, in particular as antitumor or anti-parasitic drugs. Isolation of bidtramides D, K, and L from Lissoclinum bistratum, prepn. of bistramide D by redn. of bistramide A, characterization of the bistramides, are described. Activity of bistramides D, K, and L against a variety of tumor cell lines was detd. Anti-parasitic activity against Plasmodium vinckei petteri is also presented. An injection formulation of bistramide D is included.

MSTR 1



G3 = OH / 11

L8 ANSWER 13 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

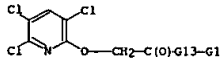
G4 = alkoxy<(1-4)>
G5 = Ak<(1-20)> (SR (1-) G3)
MPL: claim 1
NTE: substitution is restricted

L8 ANSWER 14 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 120:271065 MARPAT
TITLE: Preparation of herbicidal trichloropyridyloxyacetyl monosaccharides
INVENTOR(S): Clifford, David Philip
PATENT ASSIGNEE(S): Dow Chemical Co., UK
SOURCE: Brit. UK Pat. Appl., 27 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

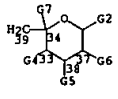
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2266305	A1	19931027	GB 1992-8088	19920413
PRIORITY APPLN. INFO.:			GB 1992-8088	19920413

AB Title compds. I (X = O, S; R = substituted monosaccharides) were prepd. as herbicides. Thus, I (X = O, R = 2,3,4,6-tetra-O-methyl-D-glucopyranosyl) (II) was prepd. from D-glucose via condensation of 2,3,4,6-tetra-O-methyl-D-glucopyranose with 3,5,6-trichloro-2-pyridylacetic acid. Compd. II reduces the phytotoxicity across a broad spectrum of trichloropyr-sensitive crops (e.g., barley, cotton, rape, soya, and sugar beet). Herbicidal activity of II against broad-leaved weeds is actually enhanced over the corresponding activity of free triclopyr I (X = O, R = H).

MSTR 1



G1 = 39



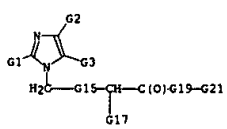
G4 = OMe
G5 = OMe
G6 = OMe
G7 = OMe
G13 = O
MPL: claim 1

L8 ANSWER 15 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 120:107011 MARPAT
TITLE: Preparation of [(carbamoylmethyl)benzyl]imidazoles as angiotensin II antagonists
INVENTOR(S): Mueller, Ulrich; Mueller-Gliemann, Matthias; Dressel, Juergen; Fey, Peter; Hanko, Rudolf; Huebsch, Walter; Kraemer, Thomas; Niewoehner, Ulrich; Beuck, Martin; et al.
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Eur. Pat. Appl., 34 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 560162	A1	19930915	EP 1993-103217	19930301
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
DE 4208052	A1	19930916	DE 1992-4208052	19920313
NO 9300722	A	19930914	NO 1993-722	19930226
US 5420149	A	19950530	US 1993-25493	19930303
AU 9334027	A1	19930916	AU 1993-34027	19930305
CA 2091435	AA	19930914	CA 1993-2091435	19930310
ZA 9301772	A	19930929	ZA 1993-1772	19930312
HU 64039	A2	19931129	HU 1993-720	19930312
JP 06056795	A2	19940301	JP 1993-78700	19930312
CN 1076444	A	19930922	CN 1993-102259	19930313
PRIORITY APPLN. INFO.:			DE 1992-4208052	19920313

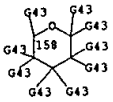
AB Title compds. [I; A = alkyl, alkenyl, cycloalkyl; B = H, halo, perfluoroalkyl; D = CH2OR3, COR4, CONR5R6, etc.; R3 = H, alkyl; R4 = H, OH, alkoxy; R5, R6 = H, alkyl, etc.; E = H, halo, NO2, OH, CF3, OCF3, alkyl, alkoxy, alkoxycarbonyl, cyano, carboxy; L = (substituted) alkyl; R1 = H, alkyl; R2 = CMe2CH2OH, etc.], were prepd. Thus, 4-MeC6H4CH2CO2CMe3 (prepn. given) was alkylated with cyclopentyl bromide using KOCMe3 in DMF to give 97.5% tert-Bu 2-cyclopentyl-2-(4-methylphenyl)acetate. This was refluxed with N-bromosuccinimide and azobisisobutyronitrile in CCl4 to give 57% tert-Bu 2-(4-bromomethylphenyl)-2-cyclopentylacetate. Condensation of the latter with 2-butyl-5-formyl-4-chloroimidazole using NaH in DMF gave 66.7% benzylimidazole deriv., which was deesterified with CF3CO2H in CH2Cl2 (87.6%) followed by amidation with 3-amino-3-phenyl-1-propanol using Et3N/MeSO2Cl/DMAP in THF to give title compd. II. I reduce arterial blood pressure in rats at clin. relevant doses.

MSTR 1



G22 = CH2
G24 = alkyl<(2-8)> (SO (-3) G25)
G25 = OH / CO2H / CF3 / CN / CHO / alkylcarbonyl<(-7)> /

L8 ANSWER 15 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
alkoxycarbonyl<(-8)> / 158



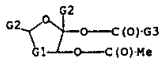
G43 = OH
DER: and salts
MPL: claim 1

L8 ANSWER 16 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 119:141647 MARPAT
TITLE: Bleaching detergent compositions containing sugar derivatives as bleach precursors
INVENTOR(S): Smith, Richard George; Thornthwaite, David W.
PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever N. V.
SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

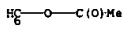
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 527039	A2	19930210	EP 1992-307138	19920805
EP 527039	A3	19950201		
R: CH, DE, ES, FR, GB, IE, IT, LI, NL, SE				
CA 2075112	AA	19930207	CA 1992-2075112	19920731
BR 9203043	A	19930330	BR 1992-3043	19920805
US 5360573	A	19941101	US 1992-926074	19920805
JP 05194997	A2	19930803	JP 1992-210427	19920806
ZA 9205901	A	19940207	ZA 1992-5901	19920806
PRIORITY APPLN. INFO.:			GB 1991-16939	19910806

AB Compns. contg. a source of H2O2 and a peroxy acid bleach precursor I or II (R1-2 = AcOCH2, H; R, R4 = C3-6 alkyl, alkenyl, alkynyl, Ph, C1-4 alkylphenyl, CH2OCOR3, CH2NHCOR3, quaternary ammonium group-contg. alkyl, etc.; R3 = R; n = 2-3) show good bleaching activity at low temp., e.g., on stained fabrics. Thus, 1-benzoyl-2,3,4,6-tetraacetylglucose was used with H2O2 for the bleaching of tea-stained fabrics.

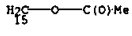
MSTR 1



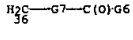
G1 = (1-2) 6



G2 = 15



G3 = 36



L8 ANSWER 16 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

G7 = O
MPL: claim 1

L8 ANSWER 17 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 118:148719 MARPAT
TITLE: Migration-resistant plasticizers in biodegradable starch-thermoplastic polymer compositions
INVENTOR(S): Bastioli, Catia; Bellotti, Vittorio; Montino, Alessandro
PATENT ASSIGNEE(S): Novamont S.p.A., Italy
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

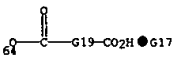
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9214782	A1	19920903	WO 1992-EP320	19920214
W: AU, BR, CA, CS, FI, HU, JP, KR, NO, PL, SU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
AU 9212226	A1	19920915	AU 1992-12226	19920214
AU 664168	B2	19951109		
EP 575349	A1	19931229	EP 1992-904038	19920214
EP 575349	B1	19980617		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE				
BR 9205651	A	19940607	BR 1992-5651	19920214
JP 06507924	T2	19940908	JP 1992-503985	19920214
HU 68412	A2	19950628	HU 1993-2378	19920214
HU 219571	B	20010528		
PL 170436	B1	19961231	PL 1992-300352	19920214
RU 2086580	C1	19970810	RU 1993-52398	19920214
AT 167503	E	19980715	AT 1992-904038	19920214
ES 2117044	T3	19980801	ES 1992-904038	19920214
CZ 284842	B6	19990317	CZ 1993-1712	19920214
ZA 9201196	A	19921125	ZA 1992-1196	19920219
CN 1066859	A	19921209	CN 1992-101580	19920219
CN 1043777	B	19990623		
IL 101017	A1	19960618	IL 1992-101017	19920219
US 5292782	A	19940308	US 1992-996880	19921228
NO 9302948	A	19930819	NO 1993-2948	19930819
PRIORITY APPLN. INFO.:			IT 1991-TO118	19910220
			WO 1992-EP320	19920214
			US 1992-839322	19920220

AB The title compns. are mixts. of starch, a thermoplastic polymer, and a plasticizer such as polyols, e.g., polyglycerol, PVA, etc., and their (thio)ether, (in)org. ester, acetal or amino derivs., and oxidn. products and specified derivs. Thus, plastic plates were prepd. by injection molding a melt-homogenized and granulated mixt. of Globe 3401 starch (11% H2O) 37, ethylene-vinyl alc. copolymer (42% ethylene, 99.5% hydrolyzed) 37, 80:20 ethylene-acrylic acid copolymer (melt flow 2 at 125.degree. and 0.325 kg) 3, Armid E 0.3, urea 5, polyglycerol 15, and H2O 2.7 parts. The plates showed neither bleeding nor loss of plasticizer after being exposed over 6 h to an artificial weathering cycle program, whereas similar plates made of the above compn. in which the polyglycerol was replaced by a glycerol (ev. glycerol content 4) became oily.

MSTR 5

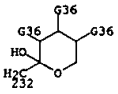
G10-G35

L8 ANSWER 17 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
G10 = 64



G19 = 71

G35 = 232



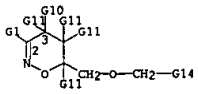
G36 = OH
DER: and salts
MPL: claim 8

L8 ANSWER 18 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 117:131232 MARPAT
TITLE: 6-alkoxy-3-(1,1-dimethylethyl)-5,6-dihydro-4H-oxazine derivatives, a method for their preparation and their use as herbicides
INVENTOR(S): Patel, Kanu Maganbhai; Stevenson, Thomas Martin
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: PCT Int. Appl., 112 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9209587	A1	19920611	WO 1991-US8243	19911113
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
AU 9190542	A1	19920625	AU 1991-90542	19911113
EP 559742	A1	19930915	EP 1992-900425	19911113
R: DE, ES, FR, GB, IT				
PRIORITY APPLN. INFO.:			US 1990-618146	19901126
			WO 1991-US8243	19911113

OTHER SOURCE(S): CASREACT 117:131232
AB Certain oxazine compds., e.g., 6-alkoxy- or 6-(benzyloxy)-3-(1,1-dimethylethyl)-5,6-dihydro-4H-oxazine derivs., and their use as herbicides are claimed. Cyclocondensation of 1-bromo-3,3-dimethyl-2-butanone oxime with methallyl alc. (CH2Cl2/Na2CO3) gave 3-(1,1-dimethylethyl)-5,6-dihydro-6-methyl-4H-oxazine-6-methanol. The latter was benzylated with 2-fluorobenzyl bromide to give 3-(1,1-dimethylethyl)-6-[[(2-fluorophenyl)methoxy]methyl]-5,6-dihydro-6-methyl-4H-oxazine (I). I had herbicidal activity against a broad spectrum of species tested.

MSTR 18



G4 = 16

G5 = OMe
G6 = 21

L8 ANSWER 18 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

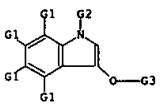
G14 = 2-tetrahydropyranyl (SO (1-2) G18)
G18 = OMe
MPL: claim 1

L8 ANSWER 19 OF 21 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 117:3817 MARPAT
TITLE: Substance determination using hydrogen peroxide produced during enzymic indigo formation
INVENTOR(S): Tsuji, Akio; Maeda, Masako; Arakawa, Hidetoshi
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

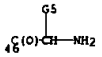
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 476930	A1	19920325	EP 1991-308338	19910912
EP 476930	B1	19971112		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
CA 2051144	AA	19920313	CA 1991-2051144	19910911
JP 04356200	A2	19921209	JP 1991-232999	19910912
AT 160177	E	19971115	AT 1991-308338	19910912
ES 2110979	T3	19980301	ES 1991-308338	19910912
PRIORITY APPLN. INFO.:			JP 1990-240018	19900912

AB A sensitive method for detn. of a substance comprises measuring the H2O2 producing during enzymic prodn. of indigo from an 3-O-indoxyl ester. An immunoassay for .alpha.-fetoprotein according to this method utilized anti-.alpha.-fetoprotein antibody-coated tubes and alk. phosphatase-anti-.alpha.-fetoprotein antibody conjugates. Chemiluminescence detection of the sample followed addn. of the indoxyl ester 5-bromo-4-chloro-3-indolyl phosphate, the luminescence reagent 2-cyclohexylaminoethane sulfonic acid, luminol, and microperoxidase. Levels as low as 1 ng .alpha.-fetoprotein/mL could be measured with good sensitivity by this technique.

MSTR 1

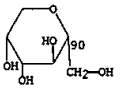


G2 = 46



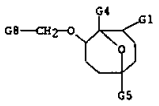
G3 = 90

L8 ANSWER 19 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G5 = CH2CONH2
MPL: claim 20
NTE: fragment 24 represents galacto-, gluco-, and mannopyranose residues

L8 ANSWER 20 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G5 = alkyl<(1-4)> (SR (1-) G6)
G6 = OH / CN / alkoxycarbonyl<(1-3)> / CO2H
G8 = 2-tetrahydropyranyl (SO (1-) G10)
G10 = OMe
MPL: claim 1

L8 ANSWER 20 OF 21 MARPAT COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 116:59211 MARPAT
TITLE: Preparation of oxabicyclo ethers as herbicides
INVENTOR(S): Powell, James Edward, Jr.; Richardson, Wendy Sue
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: PCT Int. Appl., 290 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9103464	A1	19910321	WO 1990-US4953	19900905
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
CA 2065337	AA	19910312	CA 1990-2065337	19900905
AU 9063474	A1	19910408	AU 1990-63474	19900905
AU 637406	B2	19930527		
JP 05500063	T2	19930114	JP 1990-512759	19900905
EP 593433	A1	19940427	EP 1990-913636	19900905
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
US 5234900	A	19930810	US 1992-838253	19920311
PRIORITY APPLN. INFO.:			US 1989-431734	19890911
			WO 1990-US4953	19900905

AB The title compds. [I-IV; R = PhCH2, 5- or 6-membered heterocyclyl, or Q, each ring optionally substituted; Z = CH2, NH, alkylimino, O, S, or forming a double bond with an adjacent C; l, m = 0-2; R1 = H, Me, Et, Pr; R2 = H, (un)substituted alkyl, alkenyl, alkynyl, Ph; R3-R6 = H, (un)substituted alkyl, alkenyl, alkynyl; X, Y = H, CR3R4OR6; R6 = (un)substituted alkyl, alkenyl, alkynyl, PhCH2], which are herbicidally active on a wide variety of weeds and exhibit safety to rice, cereals, and broadleaf crops, are prepd. Thus, Diels-Alder reaction of 2,5-dimethylfuran with acryloyl chloride in the presence of AlCl3 at -65 to -50.degree. followed by esterification with MeOH contg. Et3N gave 7-oxabicyclo[2.2.1]hept-5-ene (V; R7 = CO2Me). Side-chain redn. of the latter with LiAlH4 in THF and benzylation of the resultant alc. V (R7 = CH2OH) with PhCH2Br in DMF contg. NaH gave V (R7 = CH2OCH2Ph) which underwent oxidn. by m-ClC6H4CO2OH in CH2Cl2 and redn. of the resulting epoxide with Li triethylborohydride in refluxing THF gave I (R = Y = H, R1 = R2 = Me, X = CH2OCH2Ph) and its regioisomer. Approx. 170 compds. including 3 dioxabicyclooctanes III were prepd. and at 400 g/ha preemergence gave .ltoreq.100% control of, e.g. barnyard grass and giant foxtail, and gave none to moderate injury to crops, e.g. wheat, sugar beet, and rice.

MSTR 4A

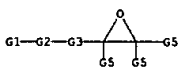
L8 ANSWER 21 OF 21 MARPAT COPYRIGHT 2003 ACS on STN

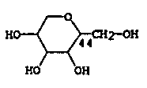
ACCESSION NUMBER: 110:191278 MARPAT
TITLE: Enzymatic method for preparation of epoxy-substituted aldose or ketose sugars
INVENTOR(S): Godtfredsen, Sven Erik; Bjoerkling, Fredrik
PATENT ASSIGNEE(S): Novo Industri A/S, Den.
SOURCE: Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 268461	A2	19880525	EP 1987-310143	19871117
EP 268461	A3	19891102		
EP 268461	B1	19930303		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
DK 8706017	A	19880519	DK 1987-6017	19871116
DK 159883	B	19901224		
DK 159883	C	19910513		
US 4859589	A	19890822	US 1987-121918	19871117
AT 86305	E	19930315	AT 1987-310143	19871117
ES 2044953	T3	19940116	ES 1987-310143	19871117
JP 63214194	A2	19880906	JP 1987-289649	19871118
PRIORITY APPLN. INFO.:			DK 1986-5498	19861118
			EP 1987-310143	19871117

AB Epoxy-substituted aldose or ketose sugars I [sugar = aldose, ketose; Z = O, S attached to terminal anomeric C-1 (aldose) or C-2 (ketose) of the sugar; Y = (substituted)alkylene; R1, R2, R3 = H, (substituted)alkyl or aryl] are prepd. by reacting sugar-O-X [sugar as above, X = H, (substituted) carbohydrate or alkyl or aryl] with hydroxylated or thiolated epoxide II (R1-R3 as above) in the presence of a glycosidase. Thus, o-nitrophenylgalactopyranoside 5 g, 2,3-epoxy-1-propanol 17.5 mL, and .beta.-galactosidase 50 units in 400 mL buffer were incubated for 4 h. The product 2,3-epoxypropyl-.beta.-D-galactopyranoside 1.1 g was prepd. by extn., SiO2 chromatog., and crystn. Various surfactants, e.g. 1-O-tetradecanoyl-3-O-.beta.-D-galactopyranosylglycerol, were prepd. from this epoxide.

MSTR 1





G2 = O
G3 = alkylene (SO (1-) G4)

L8 ANSWER 21 OF 21 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
G4 = OH / CO2H
MPL: claim 2
NTE: sugar moieties represented by G1 include .beta.D-galactose,D-ribose, D-xylose, D-arabinose, D-mannose,D-glucose,D-fructose, D-lactose, D-cellobiose, and D-maltose

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=> d ibib ab hitstr 1-4
YOU HAVE REQUESTED DATA FROM FILE 'MARPAT' - CONTINUE? (Y)/N:n

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L4 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:44687 CAPLUS
DOCUMENT NUMBER: 138:304624
TITLE: Thermal analysis of environmentally compatible polymers containing plant components in the main chain
AUTHOR(S): Hatakeyama, H.
CORPORATE SOURCE: Fukui University of Technology, 3-6-1 Gakuen, Fukui-City, Fukui, 910-8505, Japan
SOURCE: Journal of Thermal Analysis and Calorimetry (2002), 70(3), 755-795
CODEN: JTACF7; ISSN: 1418-2874
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Environmentally compatible polymers such as poly(.epsilon.-caprolactone) (PCL) and polyurethane (PU) derivs. from PCL's were synthesized from saccharides, polysaccharides, and lignins such as glucose, fructose, sucrose, cellulose, cellulose acetate, alcoholysis lignin, kraft lignin, and spdium lignosulfonate. Flexible and rigid PU sheets and foams were also prepd. by the reaction of OH groups of saccharides and lignins with isocyanates such as toluene diisocyanate (TDI) and diphenylmethane diisocyanate (MDI). Glass transition temps. (Tg's), cold-crystn. temps. (Tcc's) and melting temps. (Tm's) of saccharide- and lignin-based PCL's and PU's were detd. by differential scanning calorimetry (DSC), and phase diagrams were obtained. Methods of controlling mech. properties such as stress and elasticity of PU's through changing thermal properties such as glass transition temp. were established. Thermogravimetry (TG) and TG-Fourier transform IR spectrometry (FTIR) were also carried out in order to analyze the degrdn. temp. and evolved gases from the above obtained polymers.

IT **207300-97-8P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and thermal anal. of environmentally compatible polymers contg. main-chain components from plants)
RN 207300-97-8 CAPLUS
CN Poly[oxy(1-oxo-1,6-hexanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with D-fructopyranose (5:1), polymer with 1,1'-methylenebis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

CM 1

CRN 207300-95-6
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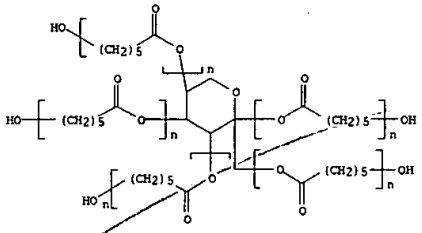
CCI PMS



CM 2

CRN 101-68-8
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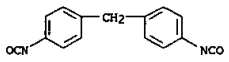


REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:631898 CAPLUS
DOCUMENT NUMBER: 133:221878
TITLE: Fructopyranosylfructose, sweetening agents containing it, manufacture of the sugar, and enzyme for it
INVENTOR(S): Nomura, Goro; Nishihara, Rikutaka; Yatake, Tsuneya
PATENT ASSIGNEE(S): Showa Sangyo Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

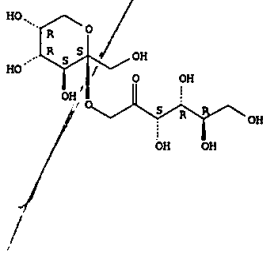
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000247991	A2	20000912	JP 1999-83508	19990326

PRIORITY APPLN. INFO.: JP 1998-373026 A 19981228

AB 1-O-.beta.-D-fructopyranosyl-D-fructose (I), useful as a low-calorie noncariogenic sweetener for foods and pharmaceuticals, is manufd. by treating diheterolevulosan II (II) with enzyme which hydrolyzes .alpha.-fructofuranoside bond of II. II (70 g) was treated with II-hydrolyzing enzyme of Bacillus sp. 56-7 at 45.degree. for 30 h to give 0.7 g I, which was not decompd. by digestive enzymes. A sweetener comprising 50 g I syrup and 50 g maltitol syrup showed sweetness 60 and similar taste with sucrose.

IT **292056-60-1P**
RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(enzymic manuf. of fructopyranosylfructose as low-calorie noncariogenic sweeteners)
RN 292056-60-1 CAPLUS
CN D-Fructose, 1-O-.beta.-D-fructopyranosyl- (9CI) (CA INDEX NAME)

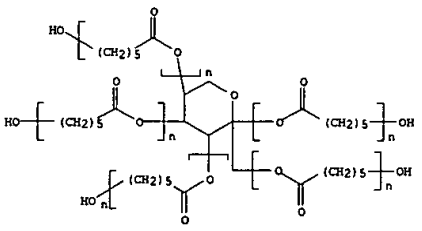
Absolute stereochemistry.



L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:315271 CAPLUS
DOCUMENT NUMBER: 129:4954
TITLE: Synthesis and physical properties of polyurethanes from saccharide-based polycaprolactones
AUTHOR(S): Hatakeyama, Hyoe; Izuta, Yoshinobu; Kobashigawa, Ken; Hirose, Shigeo; Hatakeyama, Tatsuko
CORPORATE SOURCE: Fukui University Technology, Fukui, 910, Japan
SOURCE: Macromolecular Symposia (1998), 130, 127-138
CODEN: MSYMEC; ISSN: 1022-1360
PUBLISHER: Huethig & Wepf Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Polyurethane (PU) sheets were prepd. from glucose-, fructose-, and sucrose-based polycaprolactones (PCL). The obtained saccharide-based PCL's were characterized by gel permeation chromatog., Fourier-transform IR spectroscopy, and NMR spectroscopy. The glass transition temp., thermal degrdn. temp., tensile strength, elongation, and Young's modulus of the PU sheets were measured. The obtained results suggest that the mol. motion of PU's is enhanced with increasing fraction of PCL chains in PU mols., and that at the same time the saccharide components act as hard segments.

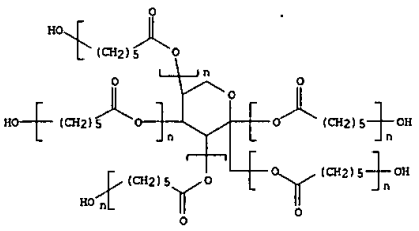
IT **207300-95-6P**
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and phys. properties of polyurethanes from sugar-initiated polycaprolactones)
RN 207300-95-6 CAPLUS
CN Poly[oxy(1-oxo-1,6-hexanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with D-fructopyranose (5:1) (9CI) (CA INDEX NAME)



IT **207300-97-8P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis and phys. properties of polyurethanes from sugar-initiated polycaprolactones)
RN 207300-97-8 CAPLUS
CN Poly[oxy(1-oxo-1,6-hexanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with D-fructopyranose (5:1), polymer with 1,1'-methylenebis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

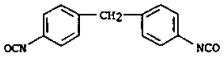
CM 1

L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)
CRN 207300-95-6
CMF (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n (C6 H10 O2)n C6 H12 O6
CCI PMS



CM 2

CRN 101-68-8
CMF C15 H10 N2 O2



L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1996:135666 CAPLUS
DOCUMENT NUMBER: 124:202942
TITLE: Method for producing xylose-bonded oligosaccharides having activity of Bifidus growth factor by enzymic transglycosidation
INVENTOR(S): Fujita, Takateru; Kitaoka, Kumiko; Takahashi, Hideki; Kitahata, Sumio; Nakano, Hirobumi; Kondo, Masao; Taniguchi, Hajime; Hashimoto, Hitoshi
PATENT ASSIGNEE(S): Ensuiko Sugar Refining, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07278170	A2	19951024	JP 1994-92904	19940407

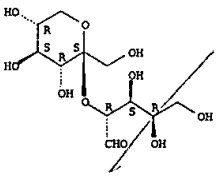
PRIORITY APPLN. INFO.: JP 1994-92904 19940407
OTHER SOURCE(S): CASREACT 124:202942

AB Oligosaccharides in which lactose, L-fucose, or L-sorbose is bonded to xylose through the .beta.-anomeric bond, more specifically oligosaccharides (I, II, and III; R = Q), which are useful as sweetening agents and materials for functional foods and drugs, are prepd. by reacting a liq. contg. an glucosylxylose (glycosyl donor substrate) with an aldose or ketose (receptor substrate), preferably lactose, L-fucose, or L-sorbose, in the presence of an enzyme having fructose transferring activity and/or yeast, preferably .beta.-fructofuranosidase derived from Arthrobacter sp. K-1. Thus, 50 g lactose and 50 g glucosylxyloside (2-O-.beta.-D-glucopyranosyl-D-xylose) were dissolved in a buffer soln. (pH 6.5), followed by adding .beta.-fructofuranosidase derived form Arthrobacter sp. (200 unit per 1 g glucosylxyloside) and 50 mg yeast (Saccharomyces cerevisiae) and making the total sugar concn. to 40 wt.%, and the resulting mixt. was allowed to react at 35.degree. with maintaining pH 6-7 to give a soln. contg. 58% lactosylxylose I. The soln. was heated for deactivating the enzyme and stopping the glucose utilization by the yeast, ultracentrifuged to remove the yeast, decolorized and desalted using activated charcoal and an ion exchange resin, and lyophilized to give 83 g I. I - III were utilized by Bifidobacterium but not easily utilized by other (potentially) harmful bacteria of human intestine, e.g Bacteroides, Clostridium, Eubacterium, Fusobacterium, Peptostreptococcus, Enterococcus, and Escherichia.

IT 174173-49-0P
RL: BPN (Biosynthetic preparation); FFD (Food or feed use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of xylose-contg. oligosaccharides having activity of Bifidus growth factor as sweetening agents)
RN 174173-49-0 CAPLUS
CN D-Xylose, 2-O-.beta.-D-sorbopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



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L4             4 S L3

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     FILE 'USPATFULL' ENTERED AT 15:22:58 ON 26 AUG 2003
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     FILE 'BEILSTEIN' ENTERED AT 15:23:06 ON 26 AUG 2003
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     FILE 'MARPAT' ENTERED AT 15:23:47 ON 26 AUG 2003
L7            26 S L3 FULL
L8            21 S L7/COM

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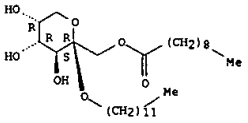
L5 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:321495 CAPLUS
DOCUMENT NUMBER: 120:321495
TITLE: Selective acylation of sugar derivatives catalyzed by immobilized lipase
AUTHOR(S): de Goede, A.T.J.W.; van Oosterom, M.; van Deurzen, M.P.J.; Sheldon, R.A.; van Bekkum, H.; van Rantwijk, F.
CORPORATE SOURCE: Lab. Org. Chem. Catal., Delft Univ. Technol., Delft, 2628 BL, Neth.
SOURCE: Studies in Surface Science and Catalysis (1993), 78(Heterogeneous Catalysis and Fine Chemicals III), 513-20
CODEN: SSCTDM; ISSN: 0167-2991
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Alkyl derivs. of glucose, galactose and fructose were acylated by lipase-catalyzed transesterification with alkanoic esters. The best results were obtained with immobilized lipases of the Candida antarctica type. Primary alc. functions were acylated first; followed by secondary ones depending on the structure of the glycoside. The water activity in the reaction medium had a striking effect on both the rate and the selectivity of the process. The size and orientation of the alkyl substituent and the structure of the acyl acceptor were also found to exert a profound influence on the course of the reaction.
IT **154992-72-0P**
RL: PREP (Preparation)
(prepn. of, by transesterification of dodecyl fructopyranoside using immobilized lipase)
RN 154992-72-0 CAPLUS
CN .beta.-D-Fructopyranoside, dodecyl, 1-decanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

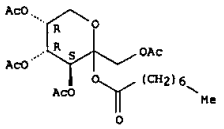


L5 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:54886 CAPLUS
DOCUMENT NUMBER: 120:54886
TITLE: Preparation of sugar esters useful as peroxy acid bleach precursors
INVENTOR(S): Thornthwaite, David William
PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever N. V.
SOURCE: Eur. Pat. Appl., 10 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 540279	A1	19930505	EP 1992-309799	19921026
R: CH, DE, ES, FR, GB, IT, LI, NL, SE				
CA 2081284	AA	19930430	CA 1992-2081284	19921023
BR 9204172	A	19930504	BR 1992-4172	19921027
JP 06065274	A2	19940308	JP 1992-290367	19921028
ZA 9208368	A	19940429	ZA 1992-8368	19921029

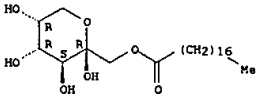
PRIORITY APPLN. INFO.: GB 1991-22910 19911029
AB The title process involves reacting a fully acetylated sugar with a carboxylic acid other than AcOH in the presence of a catalyst to give 1-acyl substituted acetylated sugars which are useful as peroxy acid bleach precursors (no data). Thus, pentaacetyl glucose was heated at 120-130.degree. with approx. a 20% excess of octanoic acid in the presence of 5 wt.% ZnCl2 to give 93% 1-octanoyl-2,3,4,6-tetraacetylglucose.
IT **151664-12-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as sugar ester peroxy acid bleach precursor)
RN 151664-12-9 CAPLUS
CN D-Fructopyranose, 1,3,4,5-tetraacetate 2-octanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



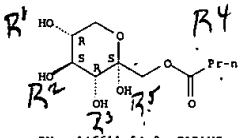
L5 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:495927 CAPLUS
DOCUMENT NUMBER: 119:95927
TITLE: Lipase-catalyzed monoacylation of fructose
AUTHOR(S): Schlotterbeck, Andrea; Lang, Siegmund; Wray, Victor; Wagner, Fritz
CORPORATE SOURCE: Inst. Biochem. Biotechnol., Tech. Univ., Braunschweig, D-3300, Germany
SOURCE: Biotechnology Letters (1993), 15(1), 61-4
CODEN: BILED3; ISSN: 0141-5492
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 119:95927
AB In a one-pot-process the lipase-catalyzed monoacylation of fructose with stearic acid in n-hexane to give esters I and II was achieved when phenylboronic acid was used as solubilizing agent.
IT **148133-66-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 148133-66-8 CAPLUS
CN .beta.-D-Fructopyranose, 1-octadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



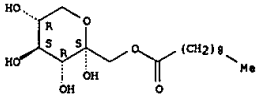
L5 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:147893 CAPLUS
DOCUMENT NUMBER: 118:147893
TITLE: Enzymic regioselective acylation of hexoses and pentoses using oxime esters
AUTHOR(S): Pulido, Rosalino; Lopez Ortiz, Fernando; Gotor, Vincente
CORPORATE SOURCE: Fac. Quim., Univ. Oviedo, Oviedo, 33071, Spain
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1992), (21), 2891-8
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 118:147893
AB Hexoses and pentoses have been acylated with Amano PS, and Candida antarctica (Novo SP435) lipases, using oxime esters RCO2N:CMe2 [R = Me, Pr, (CH2)8Me] as acyl donors. This method represents the first report of the enzymic acylation of free pentoses. The regioselectivity of the process depends on the structure of the starting material.
IT **146572-25-0P 146611-54-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 146572-25-0 CAPLUS
CN .alpha.-D-Sorbopyranose, 1-butanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 146611-54-3 CAPLUS
CN .alpha.-D-Sorbopyranose, 1-decanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



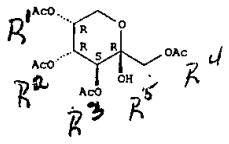
L6 ANSWER 1 OF 1 USPATFULL
ACCESSION NUMBER: 83:31601 USPATFULL
TITLE: Alkyl-ketohexopyranoside derivatives and method of use
INVENTOR(S): Noda, Kanji, Chikushino, Japan
Nakagawa, Akira, Tosu, Japan
Haraguchi, Yasushi, Kamimine, Japan
Ueda, Koichiro, Tosu, Japan
Hirano, Munehiko, Tosu, Japan
Nishioka, Itsuo, Fukuoka, Japan
Yagi, Akira, Kasuya, Japan
Koda, Akihide, Gifu, Japan
Ide, Hiroyuki, Fukuoka, Japan
PATENT ASSIGNEE(S): Hisamitsu Pharmaceutical Co., Inc., Tosu, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4395405		19830726
APPLICATION INFO.:	US 1980-150129		19800515 (6)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1979-64769	19790523

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Brown, Johnnie R.
LEGAL REPRESENTATIVE: Jordan and Hamburg
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 3
LINE COUNT: 681
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An alkyl-ketohexopyranoside derivative having pharmacological actions such as antiallergic actions, represented by the following general formula ##STR1## wherein R is an alkyl group having at least 3 carbon atoms, the derivatives excluding the D-fructose derivative wherein R is n-propyl group.
IT **55221-54-0**
(alkylation of)
RN 55221-54-0 USPATFULL
CN .beta.-D-Fructopyranose, 1,3,4,5-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:631898 CAPLUS
DOCUMENT NUMBER: 133:221878
TITLE: Fructopyranosylfructose, sweetening agents containing it, manufacture of the sugar, and enzyme for it
INVENTOR(S): Nomura, Goro; Nishihara, Rikutaka; Yatake, Tsuneya
PATENT ASSIGNEE(S): Showa Sangyo Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000247991	A2	20000912	JP 1999-83508	19990326

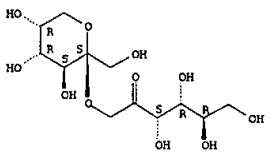
PRIORITY APPLN. INFO.: JP 1998-373026 A 19981228

AB 1-O-.beta.-D-fructopyranosyl-D-fructose (I), useful as a low-calorie noncariogenic sweetener for foods and pharmaceuticals, is manufd. by treating diheterolevulosan II (II) with enzyme which hydrolyzes .alpha.-fructofuranoside bond of II. II (70 g) was treated with II-hydrolyzing enzyme of Bacillus sp. 56-7 at 45.degree. for 30 h to give 0.7 g I, which was not decompd. by digestive enzymes. A sweetener comprising 50 g I syrup and 50 g maltitol syrup showed sweetness 60 and similar taste with sucrose.

IT **292056-60-1P**
RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(enzymic manuf. of fructopyranosylfructose as low-calorie noncariogenic sweeteners)

RN 292056-60-1 CAPLUS
CN D-Fructose, 1-O-.beta.-D-fructopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

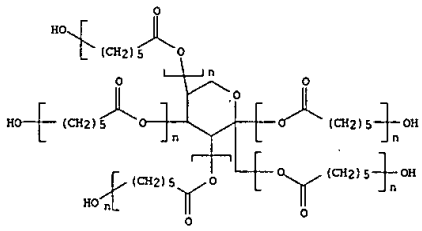


L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:315271 CAPLUS
DOCUMENT NUMBER: 129:4954
TITLE: Synthesis and physical properties of polyurethanes from saccharide-based polycaprolactones
AUTHOR(S): Hatakeyama, Hyoe; Izuta, Yoshinobu; Kobashigawa, Ken; Hirose, Shigeo; Hatakeyama, Tatsuko
CORPORATE SOURCE: Fukui University Technology, Fukui, 910, Japan
SOURCE: Macromolecular Symposia (1998), 130, 127-138
CODEN: MSYMEC; ISSN: 1022-1360
PUBLISHER: Huethig & Wepf Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Polyurethane (PU) sheets were prepd. from glucose-, fructose-, and sucrose-based polycaprolactones (PCL). The obtained saccharide-based PCL's were characterized by gel permeation chromatog., Fourier-transform IR spectroscopy, and NMR spectroscopy. The glass transition temp., thermal degrdn. temp., tensile strength, elongation, and Young's modulus of the PU sheets were measured. The obtained results suggest that the mol. motion of PU's is enhanced with increasing fraction of PCL chains in PU mols., and that at the same time the saccharide components act as hard segments.

IT **207300-95-6P**
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and phys. properties of polyurethanes from sugar-initiated polycaprolactones)

RN 207300-95-6 CAPLUS
CN Poly[oxy(1-oxo-1,6-hexanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with D-fructopyranose (5:1) (9CI) (CA INDEX NAME)



L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:135666 CAPLUS
DOCUMENT NUMBER: 124:202942
TITLE: Method for producing xylose-bonded oligosaccharides having activity of Bifidus growth factor by enzymic transglycosidation
INVENTOR(S): Fujita, Takateru; Kitaoka, Kumiko; Takahashi, Hideki; Kitahata, Sumio; Nakano, Hirobumi; Kondo, Masao; Taniguchi, Hajime; Hashimoto, Hitoshi
PATENT ASSIGNEE(S): Ensuiko Sugar Refining, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07278170	A2	19951024	JP 1994-92904	19940407

PRIORITY APPLN. INFO.: JP 1994-92904 19940407
OTHER SOURCE(S): CASREACT 124:202942

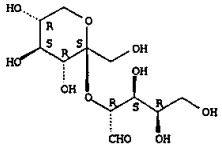
AB Oligosaccharides in which lactose, L-fucose, or L-sorbose is bonded to xylose through the .beta.-anomeric bond, more specifically oligosaccharides (I, II, and III; R = Q), which are useful as sweetening agents and materials for functional foods and drugs, are prepd. by reacting a liq. contg. an glucosylxylose (glycosyl donor substrate) with an aldose or ketose (receptor substrate), preferably lactose, L-fucose, or L-sorbose, in the presence of an enzyme having fructose transferring activity and/or yeast, preferably .beta.-fructofuranosidase derived from Arthrobacter sp. K-1. Thus, 50 g lactose and 50 g glucosylxyloside (2-O-.beta.-D-glucopyranosyl-D-xylose) were dissolved in a buffer soln. (pH 6.5), followed by adding .beta.-fructofuranosidase derived form Arthrobacter sp. (200 unit per 1 g glucosylxyloside) and 50 mg yeast (Saccharomyces cerevisiae) and making the total sugar concn. to 40 wt.%, and the resulting mixt. was allowed to react at 35.degree. with maintaining pH 6-7 to give a soln. contg. 58% lactosylxylose I. The soln. was heated for deactivating the enzyme and stopping the glucose utilization by the yeast, ultracentrifuged to remove the yeast, decolorized and desalted using activated charcoal and an ion exchange resin, and lyophilized to give 83 g I. I - III were utilized by Bifidobacterium but not easily utilized by other (potentially) harmful bacteria of human intestine, e.g Bacteroides, Clostridium, Eubacterium, Fusobacterium, Peptostreptococcus, Enterococcus, and Escherichia.

IT **174173-49-0P**
RL: BPN (Biosynthetic preparation); FFD (Food or feed use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of xylose-contg. oligosaccharides having activity of Bifidus growth factor as sweetening agents)

RN 174173-49-0 CAPLUS
CN D-Xylose, 2-O-.beta.-D-sorbopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS (Continued)



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